Chapter 6
MATERIAL CULTURE AT AYERS TOWN

This chapter considers the more than 20,000 artifacts (excluding subsistence remains and fire-broken rock) recovered by University of North Carolina archaeological investigations and attributed to the Federal period Catawba occupation of Ayers Town. These artifacts were recovered primarily from metal detecting, test unit and block excavations, and pit features; a few incidental finds also were made during the mechanical stripping of topsoil from the site.

The assemblage associated with Ayers Town, as would be expected at a Native American habitation occupied in relatively close proximity to Euroamerican settlements during the late 1700s, contains a mixture of goods locally produced by the site's inhabitants as well as manufactured items from more distant sources. In terms of sheer numbers, Catawba-made pottery is the predominant artifact class, comprising over 85% of the total assemblage. It is likely that these reflect vessels made for use by Catawbas as well as vessels marketed to Euroamerican settlers (Riggs et al. 2006). The 210 non-kaolin clay pipes and pipe fragments, representing just over one percent of all artifacts found, are the only other significant group of artifacts likely made by Ayers Town residents.

The remaining artifacts (excluding architectural debris such as fired clay and daub, and recovered samples of raw materials used in pottery production) were obtained primarily from Euroamerican sources through trade, purchase, gifting, or as payments derived from the developing Catawba land-leasing system (Pettus 2005). Many of the iron artifacts, such as hand-wrought nails and cast-iron vessel fragments, likely derive from the Hill-Hayne Iron Works (also known as the Aera & Aetna Iron Works), located on Allison Creek less than 20 mi above the Catawba towns and in operation from 1778 to 1802 (Commons 1910:304–312; SCA&H 2008). Calvin Jones, a visitor to New Town in 1815, noted that the Catawbas had no blacksmith (Jones 1815). Other items, such as English coarse and refined earthenwares, stonewares, porcelain, and glassware, derive from much more distant sources. By the time Ayers Town was established, many manufactured goods would have been accessible to Catawbas through commercial establishments in Camden, Charleston, and perhaps Charlotte.

Historical Documentation and the Archaeological Record

The only known surviving record of goods purchased on behalf of the Catawbas during the period (c. 1781–1800) that Ayers Town was occupied is provided in a list dated May 23, 1784 from the papers of Joseph Kershaw, a Camden merchant (Kershaw 1784) (Table 6.1). Notations on the list indicate that the goods were purchased in Charleston and that Kershaw was the agent responsible for distributing them; the circumstances surrounding the distribution are not known. These goods likely were intended for the entire Catawba Nation, which at this time included Ayers Town, established almost three years earlier, and at least one or two settlements on the opposite side of the river.

Table 6.1. List of Goods Distributed by Joseph Kershaw to the Catawba Indians, May 23, 1784.[1]

Description	Quantity	Unit Price	Total
Dowlas No. 1 (3 yds wide)	149 yards	1s 3d per yard	£9 6s 3d
Dowlas No. 2 (3 yds wide)	151 yards	1s 4d per yard	£10 1s 4d
Dowlas No. 3 (4 yds wide)	200 yards	1s 6d per yard	£15
Dowlas No. 4 (6 yds wide)	304 yards	1s 8d per yard	£25 6s 8d
Dowlas (as wrapper) (2 yds wide)	25 yards	1s 3d per yard	£1 11s 3d
Yellow Flannel (3 yds wide)	89½ yards	1s 9d per yard	£7 16s 7½d
Rose Garters	2 gross	10s 8d per gross	£1 1s 4d
Ribbed Garters	1 gross	12s 8d per gross	12s 8d
Highland Yards (Garters?)	1 gross	11s 4d per gross	11s 4d
Stitching Thread	½ dozen	£1 6s per ½ dozen	£1 6s
Stitching Thread	½ dozen	£1 10s per ½ dozen	£1 10s
Red Cloth (2 yds wide)	88 yards	4s per yard	£17 12s
Red Cloth (1 yd wide)	44 yards	3s per yard	£6 12s
Blue Cloth (1 yd wide)	44 yards	3s per yard	£6 12s
Blue Cloth (1 yd wide)	27 yards	6s per yard	£8 2s
Stroud	12 yards	80s per yard	£48
Shirts	7 dozen	35s per dozen	£12 5s (listed as £7 5s)
Laces	5¾ dozen	1s per dozen	5s 9d
Fish Hooks	500	4s 8d per 100	£1 3s 4d
Colored Thread	6	4s each	£1 4s
Cutteaus	12 dozen	3s 9d per dozen	£2 5s
Cutteaus	4 dozen	6s per dozen	£1 4s
Thimbles	2 dozen	2s per dozen	4s
Tin Kettles	2	3s 9d each	7s 6d
Scissors	6 dozen	12s per dozen	£3 12s
Looking Glasses	5 dozen	18s per dozen	£4 10s
Needles	2000	12s per 1000	£1 4s
Blanketting	18 yards	90s per yard	£81
Dark Ground Calico (2 yds wide)	19¾ yards	4s 4d per yard	£4 5s 7d
Light Ground Calico (1 yd wide)	10¼ yards	4s 4d per yard	£2 4s 5d
Fine Striped Calico (1 yd wide)	17 yards	5s per yard	£4 5s
Fine Striped Calico (2 yds wide)	29 yards	4s 4d per yard	£6 5s 8d
Narrow Calico (1 yd wide)	22½ yards	4s per yard	£4 10s
Curtain Calico (6 yds wide)	105 yards	3s 9d per yard	£19 13s 9d
Sealing Wax	1 pound	12s per pound	12s
Gun Powder	37½ pounds	1s 8d per pound	£3 2s 6d
Bar Lead	600 pounds	28s per 100 pound	£8 8s
Striped Linsey (2 yds wide)	69 yards	1s 9d per yard	£6 9d
Embossed Surge	21½ yards	2s per yard	£2 3s
Red Lead	1 keg	£3 10s per keg	£3 10s
Blankets (held in Charleston)	70	7s each	£24 10s
Blue Cloth (1 yd wide)	28 yards	6s 8d per yard	£9 6s 8d (listed as £9 12s 8d)
Flour	1 barrel	£1 17s 4d per barrel	£1 17s 4d
Jamaican Rum	3 gallons	5s per gallon	15s
Thimbles	9 dozen	2s per dozen	18s
Tin Cups	2	6d each	1s
Salt	4 bushels	7s per bushel	£1 8s

[1]from the Joseph Brevard Kershaw Papers, South Caroliniana Library, University of South Carolina, Columbia. Prices are in British pounds (£), shillings (s), and pence (d).

The quantity of goods, costing £414.5.6½ (including more than £45 to transport from Charleston to Camden and then on to the nation), is extensive, but perhaps the most interesting aspects are: (1) the disparity between the items listed and the manufactured goods found archaeologically at Catawba sites of the late eighteenth century; and (2) the predominance of materials and items related to general sewing and dressmaking. Most of the items on the Kershaw list are perishable fabrics that have not been preserved in the archaeological record. These include 829 yards of dowlas (linen), 231 yards of plain red and blue cotton (?) cloth, 203½ yards of printed calico, 180 yards of flannels, striped linseys, and embossed surge, 18 yards of blanketing, and 12 yards of stroud. These fabrics, along with purchased thread and lace, would have been used by Catawba women to make clothing and for bedding. Items provided for sewing garments include 2,000 needles, 11 dozen thimbles, and six dozen scissors. Examples of all three were found at Ayers Town. The only manufactured garments on the list are 24 dozen rose garters, 12 dozen ribbed garters, 12 dozen Highland yards (garters?), and seven dozen shirts. Notably absent are coats, vests, and other men's garments that are represented by the various brass, pewter, and Britannia buttons recovered from the site.

In her description of Ayers Town, Henrietta Liston noted that when she first met Col. Ayers, "the old Warrior [was] sitting in a Chair, at the side of the fire, with a blanket jacket. His Wife … sat on a Stool, with … a woolen Petticoat & a blanket about her naked shoulders" (Liston 1797:26). Before leaving, Liston revisited the town's leader. "We found that, upon hearing from the Servants who we were, he had drest himself, in an old green cloth Coat with gold binding, which buttoned very imperfectly over his naked body." (Liston 1797:28). A later visitor to New Town in 1815 observed "women with blankets" and noted that the residents there "Dress in the English fashion – homespun ex[c]ept old Mushs family." He also commented that "The women make clothes tho they do not spin" (Jones 1815).

Other perishable or consumable goods on the Kershaw list include gunpowder, sealing wax, bar lead, red lead, flour, Jamaican rum, and salt. Of these, the gunpowder and bar lead are represented both directly and indirectly by molded lead balls and shot and gun parts. Red sealing wax was recovered both as small fragments from feature contexts and as rim decorations on some of the Catawba-made pottery; the use of rum is reflected by the many dark green bottle fragments found, including a whole bottle from Feature 108 and a nearly complete bottle from Feature 89.

The remaining items on the list include 500 fish hooks, 16 dozen cutteaus (large knives used for carving or fighting), five dozen looking glasses, two tin kettles, and two tin cups. With the exception of fish hooks, all are represented in the site's artifact assemblage, though evidence of tinware exists only as small, unidentifiable fragments. Absent from Kershaw's list, but well represented in the Ayers Town assemblage and likely acquired through Camden or Charleston, are European ceramics, glassware, tablewares, brass kettles, glass beads, Jew's harps, harness hardware, and firearms.

Finally, the Kershaw list mentions 70 blankets that were being "held in Charleston," as well as a notation that 270 additional blankets were being provided "exclusive of 70 held in Charleston." This number (270) may reflect the Catawbas' population size in 1784 if a blanket was provided for every man, woman, and child in the nation. Swanton (1946) estimates that there were 400 Catawba on the eve of the American Revolution in 1775, while McReynolds (2004:45) estimates a population of 200–233 at the close of the Revolution based on an estimate

of warrior strength provided by John Smyth (1784). In 1797, Henrietta Liston noted that the Catawbas' numbers, in three towns, were "now reduced to 300" (Liston 1797:25).

Description of Artifacts

The archaeological assemblage associated with Ayers Town is described below using a modified version of an organization format established by Stanley South (1977) which considers artifacts as functional items reflecting past behaviors. Artifact classes representing similar activities are grouped together and discussed both in terms of their physical attributes as well as the past behaviors represented by their occurrence at the site. While South's original purpose was to define assemblage patterns through quantitative analysis that could be compared with other patterns to ascertain broader evolutionary trends in the archaeological record, the use here of South's functional groupings is simply to provide a meaningful organizational framework for discussing the Ayers Town artifacts. The Ayers Town artifact assemblage is summarized in Table 6.2.

Architecture Activity Group

When Henrietta Liston visited Ayers Town in 1797, she observed its Catawba residents living in two kinds of houses. One of these she recognized as a style borrowed from surrounding Euroamerican settlers, noting that "[m]any of them build their Log Houses of the same form [as their white neighbors], always adhering to one apartment only" (Liston 1797:25). These houses likely were similar to those inferred at Old Town based the distribution and spatial arrangement of deep, rectangular cellar pits (Davis and Riggs 2004; Davis et al. n.d.). At New Town, where a few cabin loci had never been subjected to plowing, similar log structures with preserved hearths and fireboxes, and the collapsed remains of stick-and-clay end chimneys, were documented through excavation (Davis and Riggs 2005; Riggs et al. 2006). These hearths were composed of stone slabs. Calvin Jones (1815) noted that while two New Town houses had wood floors, most had dirt floors. Evidence for cabins with raised floors was found at two New Town cabin loci; three other loci revealed surface hearths associated with dirt-floored cabins (Davis and Riggs 2006; Riggs et al. 2006).

Frank Speck, who conducted ethnographic fieldwork among the Catawbas between 1913 and 1944, provides an additional description of Catawba house construction based on interviews with elderly tribal members, including Margaret Wiley Brown who was a small child when the Treaty of Nation Ford was signed in 1840 (Merrell 1983:248; Speck 1946). Though her memory did not extend to the period Ayers Town was occupied, it is likely that architectural styles did not change appreciably during the several decades following the town's abandonment. Speck describes Catawba architecture as follows:

> The Catawba house, of as early a type as could be remembered by any of the older people in their childhood, was a small structure of either plain unbarked, or of peeled and roughly squared logs. From the smallest of these houses twelve by eighteen feet in dimension intended for one small family, they ranged to those seldom more than six feet larger in mean measurements. Lacking windows, having only a door at the leeward end, with hard trodden dirt floors, they had a fireplace at one end, of stone construction, and slat bedsteads on the long sides to accommodate the sleepers. Such homes were to be seen until lately. An example constructed by Chief Blue some years ago is shown in Fig. 25. It lacks the

Table 6.2. Summary of the Ayers Town Artifact Assemblage.

Activity Group & Artifact Class	N	Activity Group & Artifact Class	N
Architecture Group		**Horse Management Group**	
Nails	277	Harness and Bridle Hardware	12
Daub and Other Fired Clay	2.5 kg	Saddle Hardware	3
Arms Group		Wagon Hardware	1
Gun Parts	7	Horseshoe and Horseshoe Nails	5
Gunflints and Gunflint Flakes	21	Horse Bell	1
Ammunition	42	**Miscellaneous Hardware Group**	
Clothing Group		Tacks, Staple, and Rivets	11
Sewing Implements	19	Hinge and Hasps	3
Clothing Fasteners	28	**Metal Resource Group**	
Glass Beads	1,495	Brass	14
Shoe Buckle	1	Silver	20
Food Preparation and Consumption Group		Pewter	8
Catawba Pottery	17,134	Lead	51
Imported Pottery	320	Iron	81
Glass Containers & Tableware	203	**Pottery Production Group**	
Cast Iron Vessels	40	Potter's Clay Samples	66
Tinware	57	Red Sealing Wax Fragments	15
Knives and Spoons	9	Shell Scrapers	4
Personal Group		Burnishing Stones	5
Jewelry and Ornaments	12	Fired Clay Segments and Lumps	32
Smoking Pipes	253	**Artifacts of Indeterminate Function**	
Entertainment Items	15	Worked Stone	20
Mirror Glass	8	Clay	2
Other Items (coin, watch parts, bell-like object, key, pocket knives, dividers, fishhook, fish spear)	11	Brass	4
		Iron	11
		Wood	2
		Total (excluding daub & other fired clay)	20,323

> finishing of clay chinking between the logs, and the fireplace. The roof is of riven oak slabs laid shingle fashion in two overlapping rows. The ridge-pole rests upon the short logs at the peak. The log house has been superseded in the last half century by similarly proportioned plain buildings of sawed timber, with rough plank flooring. [Speck 1946:6]

Liston recognized another common house type at Ayers Town as being a more traditional form. "In the course of our visits through the Town, we entered several of the Wigwhams (the original form of their Houses). The fire is in the middle. In one of them we found a sick Indian lying half naked, on a Deerskin near the fire, & in all of them the half naked wretches lay indolently on skins round the fire place" (Liston 1797:27). Although she doesn't describe the method of construction, it is presumed that these too were of cribbed log construction and that the distinguishing feature was the use of a central hearth instead of a fireplace and chimney at the end of the structure. This interpretation is consistent with the absence of posthole wall patterns around the storage pits at Ayers Town, in contrast to their presence at the earlier Catawba town of Nassaw, and the fact that Liston didn't consider it necessary to make a distinction beyond the central placement of the fire.

Figure 6.1. Hand-wrought nails from Ayers Town.

Only three artifact categories found at Ayers Town can be confidently associated with the architecture described above: nails, fired clay, and daub.

Nails

Two hundred seventy-seven iron nails and nail fragments were recovered (excluding the single wire nail discussed in Chapter 4) (Figure 6.1). The overwhelming majority of these likely are associated with the occupation of Ayers Town. During analysis, nails were classified by shank type (hand-wrought or machine-cut), head type (hand wrought with two facets, hand-wrought with four facets, or machine made), tip type (squared, pointed, or flattened), and condition (complete or fragment). Maximum length and median diameter also were measured (to nearest 0.1 mm), and bent or clinched nails were noted. Twenty-seven of the analyzed nails were clinched and 19 others were bent.

Ayers Town nails fall into three categories: hand wrought (n=246), machine cut (n=25), and indeterminate (n=6). Over 91% of the hand-wrought nails with identifiable heads nails had four facets; the remainder had T-shaped or two-faceted heads. Two thirds of those with identifiable tips were pointed, while the remaining ones were spatulate, or flattened. The size distribution of hand-wrought nails indicates that most (i.e., those between 2d and 6d in size) likely were used as roofing nails to fasten wood shingles, though some may have arrived at Ayers Town as fasteners on finished items such as furniture, crates, or wagon equipment (Table 6.3). Although nails and nail fragments were recovered largely from metal detecting and plow zone excavation, 60 hand-wrought nails were found in the fill of Features 3, 4, 33, 55, 69, 72, 91, 92, 107, 108, 122, 123, 124, 155, and 185. All but five of these features are interpreted as sub-floor storage pits. The spatial distribution of nails coincides with the overall village area but does not show concentrations in areas identified as house seats.

Table 6.3. Size Distribution of Nails from Ayers Town.

Penny Size	Length (inches)	Length (nearest mm)	Hand-Wrought Nails	Machine-Cut Nails	Not Identified	Total
2d	1	22–28	11	0	0	11
3d	1 ¼	29–35	11	1	0	12
4d	1 ½	36–41	13	0	0	13
5d	1 ¾	42–47	14	4	0	18
6d	2	48–54	19	3	0	22
7d	2 ¼	55–61	6	2	0	8
8d	2 ½	62–68	7	2	0	9
9d	2 ¾	69–73	2	0	0	2
10d	3	74–79	2	0	0	2
12d	3 ¼	-	1	0	0	1
16d	3 ½	-	1	0	0	1
Fragment	-	-	160	12	6	177
Total			247	24	6	277

During the period that Ayers Town was occupied, American nail technology was transformed from a process where nails were hand-wrought and individually made to one where the process became fully mechanized. The transition began about 1790 with the production of machine cut nails that were individually headed; by 1805 machines that also created the nail head became available (Nelson 1968:6). Not surprisingly, a few nails from Ayers Town reflect this transition. Twelve machine-cut nails and 13 nail fragments were recovered from metal detecting and plow zone excavation. Of the 19 specimens with heads, 14 were hand-wrought and thus easily fall within the suspected time frame for Ayers Town. The others, with machine-manufactured heads, may or may not reflect later Catawba activities at the site. Though the sample size is small, the size distribution of machine-cut nails differs from that of the wrought nails, with a relatively higher proportion of larger nails. This may indicate that the two nail classes were used differently.

Daub and Other Fired Clay

Fragments of fired clay were recovered mostly from waterscreening feature fill through 1/4-inch and 1/16-inch mesh, and total about 2.5 kg in weight (Table 6.4). Several of these fragments exhibit log or stick impressions and are interpreted as representing chinking clay from fireplaces or stick-and-clay chimneys that has been fire-hardened, or perhaps from chinking between the wall logs of a burned cribbed-log structure. Other fragments lacking these characteristics may represent weathered daub, fragments of clay hearths, pieces of fire-baked earthen floors near hearths, or clay that was fired incidental to some other cultural or non-cultural event.

Over half (1,409.6 g, 55.6%) of daub and fired clay came from 14 features identified as cellars or storage pits. Of these, most were recovered from Features 123 (482.4 g), 140 (111.7 g), and 170 (548.2 g). While the Feature 123 and 140 fragments mostly represent architectural daub, those from Feature 170 appear to represent broken pieces of a clay hearth. The Feature 170 fragments are 10 large, slab-like pieces about 20-25 mm thick that have a smoothed (hearth?) surface and an opposing irregular surface.

Table 6.4. Daub and Other Fired Clay from Archaeological Features at Ayers Town.

Context	Weight (g)	Context	Weight (g)
Storage Pits		**Soil Borrow Pits**	
Feature 3	53.6	Feature 72	155.7
Feature 4	4.4	Feature 73	14.9
Feature 5	16.9	Feature 89	189.8
Feature 33	19.1	Feature 91	58.3
Feature 55	43.6	Feature 92	86.7
Feature 69	64.7	Feature 122	75.4
Feature 106	0.9	Feature 124	125.7
Feature 107	14.7	Feature 139	24.0
Feature 123	482.4	Feature 190	62.0
Feature 140	111.7	Sub-total	792.5
Feature 155	23.4		
Feature 162	3.3	**Refuse-Filled Stump Holes**	
Feature 163	22.7	Feature 95	1.6
Feature 170	548.2	Feature 142	14.7
Sub-total	1409.6	Feature 185	23.5
		Sub-total	39.8
Smudge Pits			
Feature 22	2.3	**Postholes**	
Feature 26	4.5	Feature 145	1.3
Feature 40	1.0	Feature 189	0.8
Feature 58	6.4	Sub-total	2.1
Feature 61	39.6		
Feature 22	2.3	**Indeterminate**	
Feature 26	4.5	Feature 101	48.0
Feature 40	1.0		
Feature 58	6.4	**Non-Cultural**	
Sub-total	53.8	Feature 28	187.5
		Total	2,533.3

Significant quantities of both daub and fired clay also were recovered from nine features interpreted as soil borrow pits, with almost 60% coming from Features 72, 89, and 124. These usually were found with other artifacts representing secondary trash deposits. Nine cob-filled smudge pits also yielded small quantities of fired clay, but these specimens likely represent remnants of baked clay pit floors and walls rather than architectural debris.

Arms Activity Group

Although investigations at Ayers Town produced only a few gun parts, moderate numbers of gunflints, gunflint flakes, and lead rifle balls or shot were recovered. This pattern is consistent with the ones observed at the partly contemporary site of Old Town and the later Federal period site of New Town (Davis and Riggs 2003), where the ratios of gun parts to lead rifle balls are 0.10:1 (n=64) and 0.18:1 (n=120), respectively. These recovery rates compare favorably with the ratio of 0.17:1 (n=49) at Ayers Town and reflect a shift away from the fragile, poorly made trade muskets that were common earlier in the eighteenth century and toward more robust and reliable American-made rifles.

In contrast, discarded gun parts and ammunition were ubiquitous at the earlier, mid-eighteenth century site of Nassaw-Weyapee, where broken or discarded gunparts occurred at a rate of 1.27 for every piece of lead shot found (a ratio of 1.27:1 (n=125), or six times the rate seen at Ayers Town). At the contemporary settlement of Charraw Town, data recovery was far less extensive than at Nassaw-Weyapee (Fitts et al. 2007); however, a similar ratio (1.25:1, n=27) of discarded gun parts to lead shot was observed. This pattern clearly points to the Catawbas' strategic importance to their South Carolina allies during the Seven Years War, their ready access to English-manufactured weapons, and the less durable firearms they received through that alliance.

Gun Parts

Seven flintlock gun parts were recovered during metal detecting and plow zone excavation; none were found in features. They include an iron frizzen spring, a brass pistol butt cap, three iron triggers (including one set trigger), a brass trigger guard, and a brass trigger guard finial (Figure 6.2). The butt cap, which has been partially flattened and reshaped, is undecorated.

Gunflints and Gunflint Flakes

Seven gunflints and 14 small flakes from gunflints were recovered. Three gunflints came from metal detecting, plowzone excavation, and backdirt from mechanical stripping; the remainder, including all gunflint flakes, were found in features. Only two of these, gunflint flakes from Features 122 and 140, came from feature contexts not interpreted as sub-floor storage pits. Gunflints were recovered from Features 5, 33, 69, and 163; the specimen from Feature 69 is made of a local aphyric rhyolite. Small gunflint flakes, identified as such based on raw material, were found in Features 55 (n=2), 69 (n=5), 108 (n=4), and 123 (n=1). These flakes are likely the byproducts of refurbishing gunflints to extend their use life. All of the gunflints in the sample have been heavily reworked but are still similar in size, ranging from 20–28 mm in length, 14–21 mm in width, and 6–11 mm in thickness.

The Ayers Town gunflints vary in terms of raw material, method of manufacture, and likely location of manufacture. Aside from the one specimen made of local material, four are made of light gray to dark gray, translucent flint and three are made of honey-colored or blond, translucent flint. This raw material distribution is also reflected in the sample of gunflint flakes, where eight are light gray to dark gray flint and six are honey-colored or blond flint. Flints with these color characteristics are usually attributed to English and French sources, respectively (Kenmotsu 1990). Of the six gunflints that can be classified by method of manufacture, two were produced on prismatic blades and the remaining ones were made on spalls. Blade and spall-type gunflints were manufactured using both types of flint.

Prior to the expansion of the English gunflint industry in the 1790s, France was a major source of gunflints used both in Britain and in British North America. It is not surprising, then, that French-manufactured gunflints are well represented at Ayers Town and the late colonial–early post-colonial Catawba sites of Old Town, Nassaw-Weyapee, and Charraw Town. In contrast, the gunflint assemblage at New Town is dominated by English-manufactured flints.

Figure 6.2. Gun parts, gunflints, and ammunition from Ayers Town: triggers (a); set trigger (b); frizzen spring (c); pistol butt cap (d); trigger guard (e); trigger guard finial (f); blade gunflints (g); spall gunflints (h-i); rhyolite gunflint (j); lead balls (k); flattened lead balls (l); and chewed lead balls (m).

Ammunition

Firearm ammunition is represented by 27 lead balls and 15 pieces of small lead shot recovered from metal detecting (n=16), plow zone excavation (n=3), and features (n=30). All but one of the feature specimens came from a probable sub-floor storage facility. Numerous other artifacts were recovered, including lead sprue and other lead fragments, which likely are byproducts of manufacturing ammunition on-site; they are described with other artifacts within the Metal Resource Group.

Of the 27 lead balls found, three had been deformed by chewing, eight were flattened (presumably from impact), one was both flattened and chewed, and the remainder were spherical. Diameter measurements for specimens in this last group range from 10.2 mm (.40 cal.) to 14.7 mm (.58 cal.) (n=15). The lead shot range from 3.0 mm (.12 cal.) to 7.9 mm (.31 cal.) in diameter (n=15). The presence of lead sprue indicates that ammunition was made on-site; however, no bullet molds were found. A single bullet mold was recovered from the contemporary settlement of Old Town.

Clothing Activity Group

As noted earlier, the 1784 list of goods provided by Joseph Kershaw to the Catawbas shows that the inhabitants of Ayers Town likely were well provisioned to construct much of their own clothing (Table 6.1). These provisions included fabrics of various types and substantial quantities of thread, lace, needles, thimbles, and scissors. Historical accounts such as the one by Henrietta Liston, as well observations by other visitors to the Nation during the period Ayers Town was occupied, indicate that many, if not, most Catawbas had adopted European styles of dress by the late eighteenth century, and the several buttons of various sizes and cufflinks recovered from the site imply that Catawbas' clothing included manufactured as well as homemade garments. While visiting a contemporary settlement (probably represented by the archaeological site of Old Town) across the river, the Rev. Dr. Thomas Coke (1791) noted that "In general they dressed like the white people. But a few of the men were quite luxurious in their dress, even wearing ruffles, and very showy suits of clothes made of cotton."

Thus, although the Catawbas had adopted the wardrobes of their white neighbors, they used these garments to create an appearance that departed from Euromerican norms and was distinctly non-Western. It follows that, on some occasions, items such as buttons may have been used, or recycled, in ways that were different from their intended or original function. While conspicuously absent from Kershaw's ledger and written accounts by visitors to the Nation during the post-Revolutionary era, the archaeological record also suggests strongly, through the ubiquitous occurrence of small glass beads, that Catawbas likely further differentiated their style of dress by the application of beaded embroidery to shirts, dresses, and jackets. Unfortunately, we have no direct evidence about the nature of this embroidered beadwork or possible gendered patterns of occurrence.

Regarding gender associations for other durable artifacts directly attributable to clothing, Hinks (1988:5–6) notes that garments with buttons as fasteners normally were worn by men in England and colonial America during the eighteenth century and that women's clothing usually was fastened with lace or hooks-and-eyes. A similar association for the Catawbas can be posited but not demonstrated, though observations made by contemporary informants are consistent with this interpretation.

Artifacts from Ayers Town that are associated with the construction, use, and decoration of clothing include sewing implements, clothing fasteners, glass beads, and a shoe buckle, and they compare favorably in terms of kinds of artifacts recovered and their relative frequency of occurrence with the assemblage of clothing-related artifacts found at Old Town.

Sewing Implements

Nineteen artifacts are interpreted as sewing implements; they include two brass thimbles, seven scissor fragments, five steel needle fragments, and five straight pins (Figure 6.3). One of the thimbles was recovered by metal detecting; the other is represented by two fragments that were recovered from Feature 33, a sub-floor storage pit. The poorly preserved scissor fragments all came from Zone 1 in Feature 163, another sub-floor storage pit, and appear to represent a single pair of scissors.

Figure 6.3. Brass thimble (left), straight pins (middle), and pewter shoe buckle fragment (right) from Ayers Town.

All of the needle fragments and straight pins came from 1/16-inch washings and heavy fractions of waterscreened and flotation-processed feature fill. The round-headed straight pins are made of brass wire, and individual examples were recovered from Features 123, 155, 163, 185, and 190. Four of these features are storage pits. Five heavily corroded pieces of fine, straight, steel wire needles were recovered from Features 3 (n=2), 55 (n=2), and 123 (n=1), all probable sub-floor storage facilities.

Clothing Fasteners

Twenty-one buttons, a pair of cufflinks, three cufflink buttons, and five glass insets from buttons were recovered from metal detecting (n=5), plow zone excavation (n=4), and features (n=21) (Figures 6.4 and 6.5). Of those specimens recovered from archaeological features, only three came from contexts not interpreted as a sub-floor storage pit or cellar. It is likely that these artifacts were fasteners from manufactured garments rather than items which were purchased and applied to Catawba-made clothing. While a few buttons, being of identical size and type, may have come from the same garment, most exhibit a range of sizes, types, and decoration. As for how they were used, Hinks (1988:84) has argued that "in the eighteenth century buttons were primarily associated with articles of men's clothing, upon which they were profusely used. These garments primarily included great coats, coats, frocks, waistcoats, breeches and trousers, jackets, shirts, and banyans. A variety of different types of buttons were used on various garments, and they can normally be distinguished from each other." The degree to which this applies to Catawbas in the late eighteenth century is not entirely clear; however, the relatively small number of buttons found at Ayers Town is consistent with the generally low button density at Old Town (n=15) and, when compared to a sample of 194 buttons recovered at New Town, suggests that the use of buttons as clothing fasteners was far more common during the first decades of the nineteenth century.

The Ayers Town buttons represent four methods of manufacture: (1) brass disks with soldered alpha shanks (n=7); one-piece buttons of cast pewter with drilled eyes (n=2); two-piece buttons of cast brass or Britannia (tombac) with alpha, omega, or cone-with-wire-eye shanks (n=7); and two-piece hollow buttons of brass, hard white pewter, or copper with drilled eye or

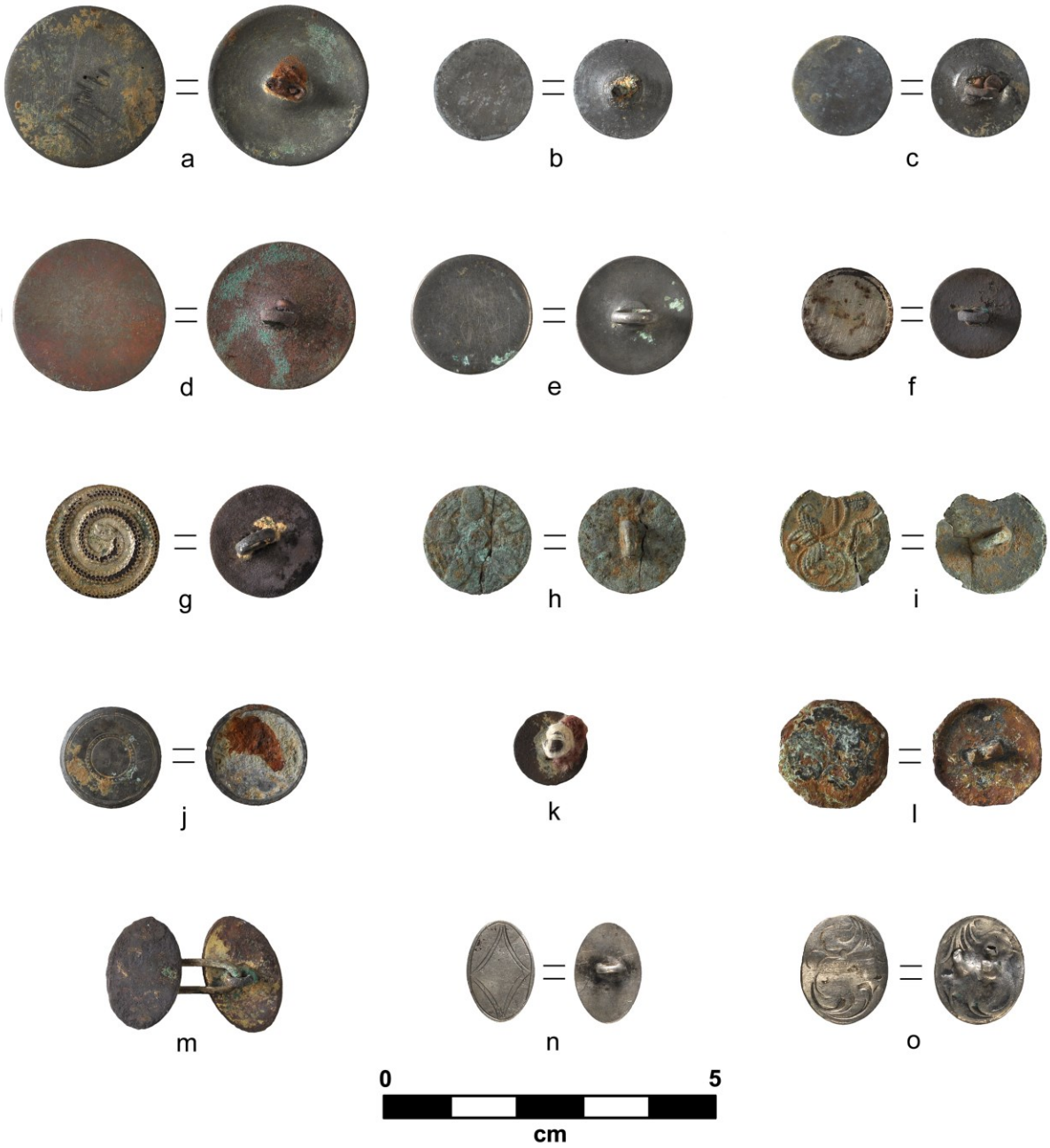

Figure 6.4. Buttons from Ayers Town: two-piece cast Britannia (a–c, e); two-piece cast brass (d); brass disk with silver plating (f); brass disk with embossed, silver-plated rattlesnake (g); embossed cast pewter with drilled eye (h–i); two-piece hollow button face (j); brass disk with preserved cotton thread (k); and cufflink buttons (l–o).

Figure 6.5. Close-up of decorated buttons from Ayers Town.

indeterminate shanks (n=5). They range from 11.1 mm to 25.3 mm in diameter, most are plain, and none have stamped backmarks. Six of the seven brass disk buttons are plain, with two having silver-plated faces and one exhibiting traces of gilt on the back surface. The remaining brass disk button also is silver-plated and has an embossed rattlesnake on the face (Figures 6.4g and 6.5a). The snake, coiled and possessing 13 rattles, was a powerful symbol of American patriotism during the American Revolution and its aftermath. Of the remaining buttons, each of the one-piece cast buttons has an embossed floral motif on the face (Figure 6.5b–c). Conversely, none of the two-piece cast buttons have decorated faces, and only one of the two-piece hollow buttons is decorated. It has two engraved lines along the perimeter and two nested circles at the center (Figure 6.5d).

Two of the cufflink buttons are oval, made of silver, and have soldered silver shanks (Figure 6.5f–g). One has a stamped floral motif; the other has a finely engraved diamond motif formed by parallel, concave lines and contained within an engraved oval. A third cufflink button is a one-piece, cast octagonal button with a floral motif on its face (Figure 6.5e). The cufflink pair consists of plain, oval buttons joined by a wire loop (Figure 6.4m). Both the buttons and the link are gilted and, although the button faces are extensively worn, one exhibits the faint impression of a lightly engraved floral motif.

Five glass set stones from two-piece buttons were recovered. Two of these are oval in shape, made of flat turquoise and clear glass, and likely represent cufflink button faces (Figure 6.5h). The remaining three are circular and 10–11 mm in diameter. One is clear with facets, one is brite navy with facets (Figure 6.5i), and one is clear with a convex surface.

Finally, a small, thin disk measuring 19 mm in diameter and made of tin or a copper alloy, was recovered from Feature 33. It appears to be a component of a two-piece button.

Glass Beads

A total of 1,494 glass beads and one jet bead representing 48 separate types were recovered during excavations at Ayers Town (Table 6.5, Figure 6.6). All but seven of these came from waterscreened or flotation-processed feature fill, and most came from sub-floor storage facilities. Fourteen features classified as storage pits (Features 3, 4, 5, 33, 69, 106, 107, 108, 116, 123, 155, 162, 163, and 170) and one classified as a rectangular cellar (Feature 55) produced 1,399 beads, while 19 other features contained a total of only 89 beads.

Beads were classified by form, size, color, and diaphaneity using categories proposed by Kidd and Kidd (1970). In order to understand the significance of the Ayers Town bead assemblage as it relates to changing Catawba practices of adornment during the eighteenth and early nineteenth centuries, beads from four other Catawba sites also were analyzed in a similar manner, providing a 70-year perspective on Catawba bead use. This analysis included assemblages from: Nassaw-Weyapee (n=17,883 beads) and Charraw Town (n=7,156 beads), both occupied c. 1750–1760; Old Town (n=2,122 beads), partly contemporary with Ayers Town and occupied during the 1760s–1790s; and New Town (n=497 beads), occupied from the 1790s until about 1820 (Duffield and Davis 2011).

Following classification of beads from all sites, the relative frequency of bead types was calculated for each site, and the percentage differences in bead type, bead size, and bead color were compared. The density of beads at each site also was compared by examining the quantities of beads found in measured flotation heavy fractions from archaeological feature contexts (excluding smudge pits).

The goals of this analysis were: (1) to examine changes in bead size that might indicate a shift in how beads were used (e.g., small beads reflecting the use of embroidered beadwork to decorate garments and other personal items, and large beads likely reflecting the use of beads in jewelry such as necklaces); (2) to examine changes in color that might indicate shifts in the composition of embroidered beadwork or jewelry; and (3) to use bead density as a measure to evaluate overall shifts in the popularity of beads for clothing decoration and personal adornment. Chronological changes in these three variables (i.e., size, color, and density) are shown in Figures 6.7, 6.8, and 6.9.

The most striking chronological pattern is the dramatic decline in bead density following the abandonment of Nassaw-Weyapee and Charraw Town. Whereas glass beads were ubiquitous in all excavated contexts at these two sites, most contexts at later sites yielded only modest samples of beads and several contexts did not yield beads. This suggests a fundamental shift in how glass beads were used by Catawbas.

Insight into the nature of this shift can be gained by examining corresponding changes in bead size and color over time. Despite the precipitous decline in bead density, small glass "seed" beads continue to dominate bead assemblages into the 1790s, including the assemblage from Ayers Town. These small beads are thought to reflect a continuation of the practice, common since the mid-17th century, where clothing often was elaborately decorated with beaded embroidery. Although one third of the Ayers Town bead types (i.e., those classified as large or extra large) probably represent necklace rather than embroidery beads, they comprise only 5.2% (n=78) of the total bead assemblage. The decline in overall bead density may indicate a shift during this period from designs involving patterns within large, beaded panels to designs sewn

Figure 6.6. Glass bead types from Ayers Town.

Table 6.5. Summary of Glass Beads from Ayers Town.

Image	Kidd & Kidd Type	N	%	Form	Size	Color	Diaphaneity
1	Ia	36	2.41	simple tube	small	black	translucent
2	Ia	14	0.94	simple tube	medium-large	dark palm green	opaque
3	Ia	16	1.07	simple tube	small	pale blue	opaque
4	Ia5	6	0.40	two-layered tube	small	white (clear coating)	opaque
5	Ia5	2	0.13	two-layered tube	medium-large	white (clear coating)	opaque
6	Ia15	11	0.74	simple tube	medium-large	dark blue	translucent
7	Ia16	11	0.74	simple tube	medium-large	dark navy	opaque
8	Ia18	5	0.33	simple tube	small-medium	dark navy	translucent
9	Ia21	6	0.40	simple tube	small	ruby	translucent
10	Ib5	12	0.80	striped tube	large	dark blue (red & white stripes)	opaque
11	Ib11	1	0.07	striped tube	large	white (red stripes)	opaque
12	Ic4	10	0.67	simple tube, faceted	small	black	opaque
13	Ic8	3	0.20	simple tube, faceted	medium	amber	clear
14	If	93	6.22	simple tube, faceted (8 sides & ends)	small	rose wine	translucent
15	IIa	5	0.33	simple tube, rounded	small	apple green	translucent
16	IIa	34	2.27	simple tube, rounded	small	black	opaque
17	IIa	4	0.27	simple tube, rounded (oval)	small	brite copen blue	opaque
18	IIa	1	0.07	simple tube, rounded	medium	dark brown	translucent
19	IIa	17	1.14	simple tube, rounded	small	dark navy	translucent
20	IIa	1	0.07	simple tube, rounded	small	pale blue	opaque
21	IIa	3	0.20	simple tube, rounded (oval)	small	surf green	opaque
22	IIa	3	0.20	simple tube, rounded	small-medium	surf green	translucent
23	IIa5	214	14.31	simple tube, rounded	very small-small	ruby	translucent
24	IIa8	1	0.07	simple tube, rounded (oval)	small	black	opaque
25	IIa9	13	0.87	simple tube, rounded	small	light gray	clear
26	IIa11	4	0.27	simple tube, rounded	small	white	opaque
27	IIa13	830	55.52	simple tube, rounded	very small-small	white	opaque
28	IIa13	11	0.74	simple tube, rounded	medium-large	white	opaque
29	IIa13	2	0.13	simple tube, oval	large	white	opaque
30	IIa15	7	0.47	simple tube, rounded (oval)	small-medium	white	opaque
31	IIa27	6	0.40	simple tube, rounded	small	emerald green	translucent
32	IIa28	10	0.67	simple tube, rounded	medium	dark palm green	translucent
33	IIa60	1	0.07	simple tube, rounded (oval)	small-medium	rose wine	opaque
34	IIb12	1	0.07	striped tube, rounded	medium	black (white stripes)	opaque
35	IIg	1	0.07	simple tube, rounded (oval)	medium	white (green design)	opaque
36	IIIa	2	0.13	multi-layered tube	large	dark navy (white stripes)	opaque
37	IIIa1	1	0.07	two-layered tube	small	redwood over light gray	opaque

Table 6.5 Continued.

Image	Kidd & Kidd Type	N	%	Form	Size	Color	Diaphaneity
38	IVa1	77	5.15	two-layered tube, rounded	small-medium	redwood over light gray	opaque
39	WIb	3	0.20	wire wound, rounded	small	black	opaque
40	WIb	3	0.20	wire wound, rounded	medium	clear	translucent
41	WIb2	2	0.13	wire wound, rounded	medium	white	translucent
42	IIa25	2	0.13	simple tube, rounded (oval)	large	surf green	opaque
43	WIb	2	0.13	wire wound, rounded	large	black	translucent
44	WIb5	3	0.20	wire wound, rounded	large	light gray	translucent
45	WIb9	1	0.07	wire wound, rounded	medium-large	dark palm green	translucent
46	WIb14	1	0.07	wire wound, rounded	very large	brite Dutch blue	opaque
47	WId	2	0.13	wire wound, donut	large	brite navy	translucent
48	Jet bead	1	0.07	rectangular	large	black	opaque
Total		1,495	100.00				

Note: Kidd and Kidd Type descriptions can be found in Kidd and Kidd (1970).

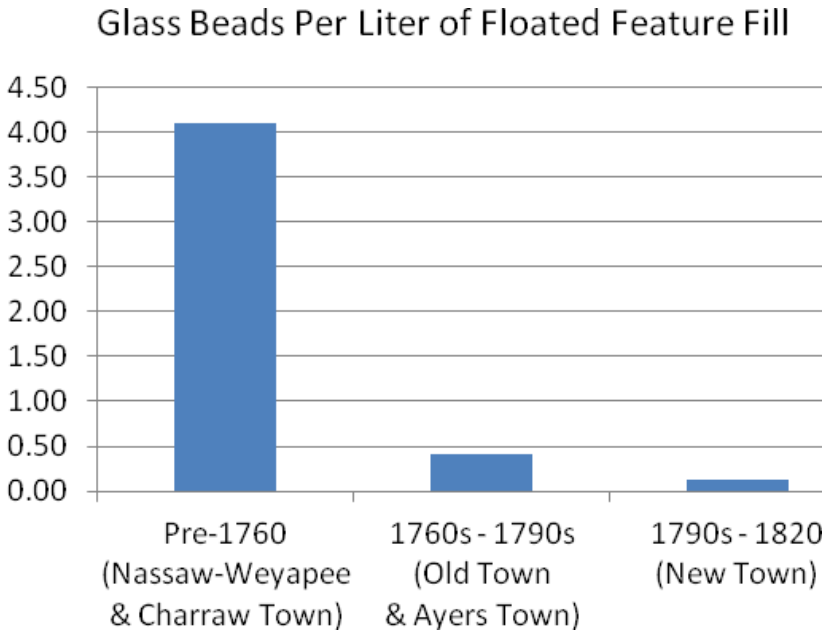

Figure 6.7. Average bead density by chronological period.

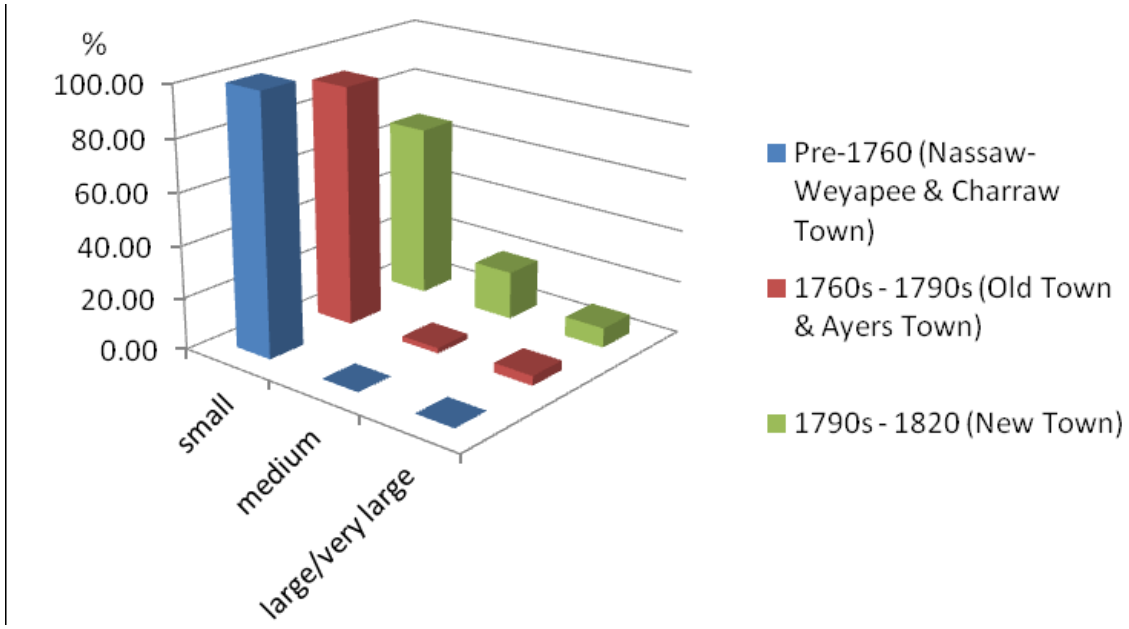

Figure 6.8. Frequency distribution of glass beads by size and sites.

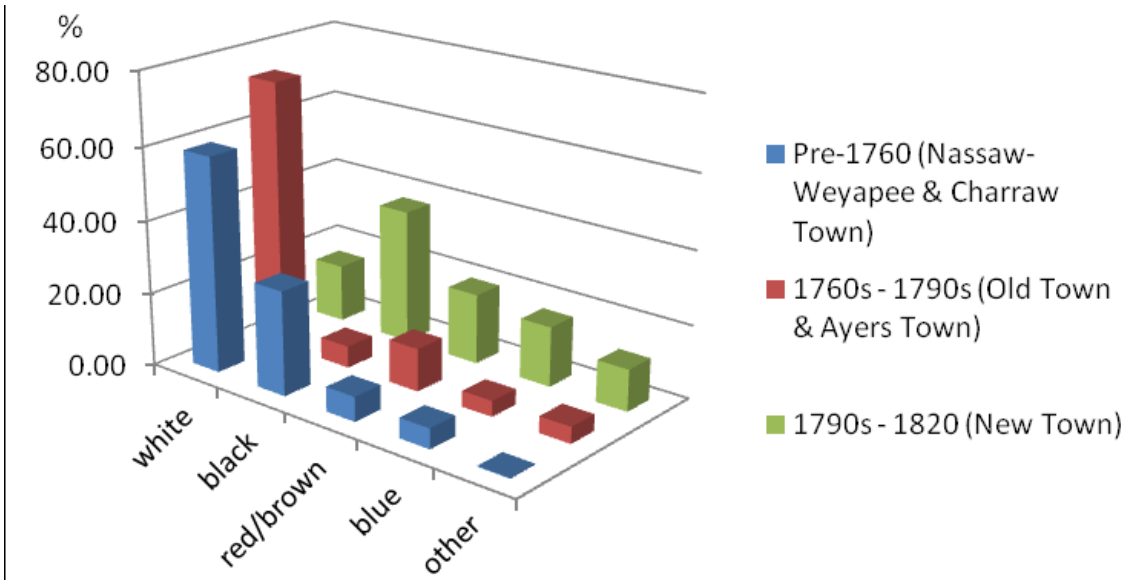

Figure 6.9. Frequency distribution of glass beads by color and sites.

onto garments without a beaded background. The significantly greater numbers of medium-sized, large, and very large beads at New Town, many of which are faceted, can be attributed to a shift toward the use of glass beads in jewelry such as necklaces.

While variation in bead color is more difficult to interpret and likely involves cultural norms regarding color significance, as well as other possible factors, the predominance of small white beads prior to the 1790s can be attributed to embroidery designs of predominantly black (pre-1760) and red/brown (1760s–1790s) beads being applied to a white background. The greater diversity in bead color at New Town is seen as supporting the argument that Catawbas in the

post-1790s era used glass beads in ways that were fundamentally different from their predecessors.

Shoe Buckle

One fragment of a cast pewter shoe buckle frame, decorated with rectangular perforations, was recovered from Feature 123. Brass shoe buckles also have been recovered from Old Town. Noel Hume (1970:86) notes that shoe buckles were in use in America between about 1700 and 1815, with the most expensive ones cast from silver or brass and occasionally jeweled. The least expensive buckles were made of iron or cast pewter, such as the one found at Ayers Town.

Catawba-Made Coarse Earthenware Ceramics

Artifacts associated with food preparation and consumption comprise the majority (87.7%) of all archaeological materials recovered at Ayers Town. Of these, most are fragments or sections of Catawba-made, coarse earthenware vessels and include 17,134 potsherds weighing a total of 53.1 kg. Potsherds were ubiquitous in all excavated contexts except smudge pits, which seldom contained artifacts. While more than half of the sample (n=8,789, or 51.3%) came from unit excavations, these potsherds usually were small and heavily eroded, and therefore were of limited value to understanding the overall vessel assemblage at the site. Over 75% were less than 2 cm in diameter and only one potsherd was greater than 6 cm in diameter. Conversely, the 7,976 pottery fragments recovered from feature contexts were often much larger and better preserved, and many re-fit to form vessel sections and complete or nearly complete vessels. Sixty rim sherds, vessel sections, and reconstructed vessels, all from feature contexts, were sufficiently large or complete enough to obtain specific information about vessel size and shape. These "numbered" vessels form the basis for characterizing the Ayers Town vessel assemblage and are illustrated and described individually in Appendix B.

One of the more significant findings of archaeological research at historic Catawba sites over the past decade has been the demonstration of an abrupt and rapid change in Catawba ceramic technology coinciding with the devastating 1759 smallpox epidemic and the Catawbas' subsequent abandonment of the Nation Ford area (Riggs 2010). As documented at the 1750s sites of Nassaw-Weyapee and Charraw Town, Catawba ceramics during this period show strong technological and stylistic continuity with the South Appalachian Mississippian Lamar tradition. This tradition is manifested within the Catawba valley during the late pre-contact and early contact periods as the Cowans Ford ceramic series (dominated by thickened-rim jars with curvilinear complicated-stamped exteriors and cazuela or carinated bowls with incised decorations) and is represented at the Hardins and Belk Farm sites, respectively (Riggs 2010:31–34; also see Keel 1990 and Moore 2002). Following the abandonment of Nation Ford in late 1759–early 1760 and temporary resettlement downriver at Pine Tree Hill (now Camden), surviving Catawba potters began the exclusive production of plainwares, and traditional Mississippian vessel forms were replaced with forms (e.g., plates, teacups, saucers, bowls, and pans) that would have been commonplace among the Euroamerican settlers in the Carolina backcountry. Ceramics of this new tradition, identified typologically as River Burnished by Ferguson (1990) and others, and generally regarded as "colonoware" when found in Euroamerican contexts outside the Catawba valley, comprise the entire Catawba-made vessel

assemblages at Ayers Town as well as Old Town, New Town, and the Bowers site, and they occur at these late eighteenth–early nineteenth-century Catawba sites in the absence of ceramics suggestive of the earlier Cowans Ford series (see Riggs 2010 for a more thorough discussion of this transformation).

Catawba pottery-making survives today as an important art form and is tied through an unbroken tradition to the earlier Ayers Town potters, as well as those residing at other contemporary settlements. As practitioners of the oldest surviving pottery-making tradition in the eastern United States, Catawba potters were studied by ethnographers on three separate occasions between 1884 and 1908 (Harrington 1908; Holmes 1903), and a fourth study was conducted in 1940 (Fewkes 1944). In 1884 Edward Palmer, an employee of the Smithsonian Institution's Bureau of Ethnology, recorded general observations about Catawba pottery-making on their reservation in South Carolina, and in 1890 James Mooney, another Smithsonian ethnographer, recorded the work of two Catawba potters—Sally Wahuhu and Susanna Owl—who were living among the Cherokee in western North Carolina (Holmes 1903:53–55). Sally Wahuhu, who Mooney described as being 80 years old and having left the Catawba reservation about 1840, would have been born about a decade after Ayers Town was abandoned. In the early twentieth century, Mark Harrington (1908) recorded Catawba pottery-making as practiced by Rachel Brown, her husband John Brown, and their eldest daughter while on an expedition to collect ethnographic specimens for George G. Heye. These ethnographies have direct relevance to understanding how the wares at Ayers Town were produced, even though the Catawba potters being studied were no longer making many utilitarian wares for their own use. As Harrington (1908:401–402) observed:

> That the Catawba now use but little of their own pottery became clear when I inquired for old vessels that had seen actual service. A few such, and a few only, were obtained, comprising cooking pots (*tûsyamûsē*) with and without legs, bowls (*tûsuī'*), and jars (*ĭtûskī*) for keeping milk and other liquids, all more or less of old types, but differing from most prehistoric forms in having flat instead of rounded bottoms.

According to both Mooney and Harrington, the paste used by Catawba potters was a mixture of two kinds of clay: "a fine-grained stiff variety called "pipe clay" (*wĭmĭsûīnto*), and a coarse, lighter, crumbly kind known as "pan clay" (*īntoītûs*) (Harrington 1908:402). Mooney noted further that the second type of clay "contains sand so coarse as to give it a gritty texture" (Holmes 1903:53). Except for the firing process, the descriptions given by Palmer, Mooney, and Harrington for how a pottery vessel was built are remarkably similar. Mooney described the process as follows:

> In making a vessel a sufficient quantity of the paste was placed by the Catawba women on a board and rolled into cylinders about an inch thick, which were cut up into sections eight or ten inches long. A small mass of clay was then taken, from which a disk about five inches in diameter was formed; this, turned up at the edges, served as the bottom of the vessel. It was placed on a board and one of the strips of clay, properly flattened out, was carried around its circumference and broken off on completing the circuit. The margin was bent slightly upward and the junction was rubbed over with the thumb nail to unite it. The process was repeated until the bowl was complete, the last strip being turned slightly outward with the fingers to form the rim. The joints were then rubbed over with the nails, and the whole surface, inside and out, was rubbed with a piece of gourd shell until it became quite even. During the smoothing process the vessel was beaten with the hands and dexterously turned by tossing in the air. The work up to this point had occupied about fifteen minutes. In the case of vessels requiring ears or handles, small cylinders of stiff clay were shaped, set in holes bored through the vessel, and clinched inside, and the joints were carefully smoothed over. The vessel was then allowed to dry until the next day. Having

> remained in the sun for a number of hours it was again placed on a board which was held in the lap and the surface was scraped with a bit of gourd shell until the walls were sufficiently thin and even. Some parts, including the edges, were pared off with a knife. When the scraping or paring dislodged grains of sand, the holes were filled with bits of clay from the bottom of the vessel and the surface was smoothed over with the fingers. The surface was now rubbed over with the gourd shell and polished with a smooth pebble which, in this case, had been brought from South Carolina by the elder woman. This part of the process, occupying about fifteen minutes, finished the second day's work.
>
> After the vessel had dried until the afternoon of the third day, in the sun, as far as possible, the surface was again rubbed inside and out with the polishing stone. This work occupied half an hour. After this the vase was placed before the fire where not exposed to drafts and dried or baked for an hour; it was then ready for firing…. [Holmes 1903:54]

Excluding the time required to dig and prepare the paste mixture, and to dry and fire the final product, the process of building, shaping, thinning, and burnishing a vessel by skilled potters such as Sally Wahuhu and Susanna Owl was remarkably brief—about an hour per pot spread over three days. At this rate, Catawba potters had the capacity to produce large numbers of vessels when needed.

Sally Wahuhu told James Mooney that she did not fire her pots in the traditional Catawba manner, which was to "not burn their wares in the fire, but baked them before it" (Holmes 1903:53). This would appear to be confirmed archaeologically at Ayers Town, Old Town, and New Town, where incompletely fired sherds (i.e., those with fire-hardened exteriors and soft, clayey interiors) are occasionally found that become soft and slowly dissolve when soaked in water. The "indirect" method of firing pottery was demonstrated to Harrington, who gave the following report:

> Burning of pottery is now generally done in the house on the hearth of the large open fireplace, to avoid drafts; but some years ago the firing took place out of doors in a gully, or hollow, a still night being usually selected. The Browns arranged an old style out-door burning for my benefit, with the warning that, as a stiff breeze was blowing, some of the pieces might crack.
>
> The first step was to prop the vessels up around the fire, their mouths toward the blaze…. Here they remained for two or three hours, a peculiar black color spreading over them as they grew hotter and hotter. When this color had become uniform — a sign that they were hot enough — John raked the blazing brands out of the fire and inverted the vessels upon the coals and hot ashes…which were then pushed up around them and the whole covered thickly with pieces of dry bark pulled from old pine stumps…. When the bark had burned away, the red-hot vessels were pulled out and allowed to cool slowly around the fire. One had cracked, as predicted, and all the pieces were more or less mottled by drafts. The black color of the first heating, however, had given place to the typical reddish yellow of Catawba pottery. I was informed that when uniform shiny black color is desired, the ware, after the preliminary heating, is imbedded in bits of bark in a larger vessel of clay or iron, which is then inverted upon the glowing coals and covered with bark. After one or two hours the firing is complete and the vessels have acquired a brilliant black color which seems to penetrate their very substance. [Harrington 1908:404–405]

Method of Analysis

Because of the fragile nature of archaeological ceramics, archaeologists usually study potsherd assemblages rather than vessel assemblages. At Ayers Town, no intact vessels were recovered and more than three-fourths of all potsherds were less than 2 cm in diameter. Despite this, the numerous subsurface pits excavated at the site provided protected contexts for deposits of primary refuse, and many such deposits contained large vessel sections and, in some

instances, fragments from which complete or nearly complete vessels could be reconstructed. Of the 17,134 potsherds recovered at the site, only 839 could be assigned with confidence to a specific vessel type. Taking into account re-fits and sherds that can be attributed to a single vessel based on distinct or unique stylistic attributes, these sherds represent a maximum of 414 individual vessels (and probably much fewer). Only 60 of these individual vessels were sufficiently complete to ascertain vessel size and overall vessel shape.

Analysis of Catawba-made earthenwares from Ayers Town was performed at two levels. First, all sherds were systematically coded for a series of morphological and stylistic attributes, including: sherd size, sherd thickness, portion of vessel represented, paste characteristics, exterior surface treatment and color, interior surface treatment and color, sherd curvature, rim configuration, lip shape, decoration, and vessel type. Cross-mends were noted, and other observations were recorded about sherd condition and unusual physical characteristics. Second, during the sherd analysis all sherds and re-fitted vessel sections large enough to determine overall vessel size and shape were assigned a unique vessel number and individually described and illustrated (see Appendix B). Attributes recorded for each vessel include: context, vessel type, paste temper, exterior surface treatment and color, interior surface treatment and color, rim and lip form, basal form, decoration, rim diameter, vessel height, and wall thickness. The 60 vessels treated in this manner, all recovered from feature contexts, comprise a representation of the Ayers Town vessel assemblage. Recorded sherd and vessel attributes are considered in greater detail below.

Sherd Size

Sherd size was measured using a template of concentric circles graduated at 2 cm intervals (i.e., 0–2 cm, 2–4 cm, 4–6 cm, 6–8 cm, etc.). The smallest size category was further divided into two categories: 0–1 cm and 1–2 cm. Sherds that were less than 2 cm in diameter were counted but not described in greater detail. Overall, sherds less than 1 cm in diameter comprised about 21% of the sample, sherds from 1–2 cm in diameter comprised 56%, sherds from 2–4 cm comprised 18%, and those larger than 4 cm comprised the remaining 5% (Table 6.6). All but 32 of the 764 sherds larger than 4 cm came from feature contexts.

Sherd size is a useful measure for differentiating between deposits of primary (containing larger sherds) and secondary (containing smaller sherds) refuse disposal. Recording sherd size and estimating vessel exterior surface area for complete and largely complete vessels where overall vessel size and shape can be determined also permits rough estimates to be made about the potential total number of vessels represented by a sherd assemblage at a site.

At Ayers Town, 24 vessels ranging from small cups to large pans were sufficiently complete to calculate both surface area and volume (Tables 6.6 and 6.7, Figure 6.10). If it is assumed that these vessels are representative of the range, composition, and proportion of the overall vessel assemblage (an assumption that cannot be demonstrated), then the average surface area represented by a vessel is about 766 cm^2 (with a range of 99 cm^2 for a miniature jar to 3139 cm^2 for a large pan). An estimate of the total vessel surface area represented by sherds at the site can be derived by adding the ceramics recovered from features (47,345 cm^2), which includes all excavated features except graves and one feature intruded by a grave) to the estimated total number of sherds contained within the plowed soil (457,020 cm^2) projected from the 5% sample of 111 excavated 1x1-meter units). This gives a total estimated vessel surface area of 504,365

Table 6.6. Distribution of Sherds by Size and General Excavation Contexts with Estimates of Total Vessel Surface Area Represented.

	Sherd Counts					*Estimated Total Vessel Surface Area*			
Size	**Excav. Units**	**Fea-tures**	**Other**	**Total**	**%**	**Est. Per Sherd Surface Area**	**Excav. Units**	**Features**	**Total**
<1 cm	1,610	1,945	9	3,564	20.80	0.53	859.85	1,038.77	1,903.43
1–2 cm	5,876	3,586	179	9,641	56.27	1.96	11,537.50	7,041.09	18,930.06
2–4 cm	1,287	1,713	165	3,165	18.47	7.85	10,108.07	13,453.87	24,857.85
4–6 cm	15	460	15	490	2.86	20.42	306.31	9,393.36	10,005.97
6–8 cm	1	158	1	160	0.93	39.27	39.27	6,204.65	6,283.19
8–10 cm	0	68	0	68	0.40	64.40	0.00	4,379.38	4,379.38
10–12 cm	0	24	0	24	0.14	95.82	0.00	2,299.65	2,299.65
12–14 cm	0	12	0	12	0.07	133.52	0.00	1,602.21	1,602.21
14–16 cm	0	8	0	8	0.05	177.50	0.00	1,420.00	1,420.00
16–18 cm	0	1	0	1	0.01	227.77	0.00	227.77	227.77
18–20 cm	0	1	0	1	0.01	284.31	0.00	284.31	284.31
Total	8,789	7,976	369	17,134	100.00		22,851.00	47,345.06	72,193.81

Surface area measurements are in square centimeters.

Table 6.7. Rim Diameter, Height, Surface Area, and Volume for 24 Vessels Recovered from Ayers Town.

Vessel	**Vessel Type**	**Rim Diameter (cm)**	**Vessel Height (cm)**	**Surface Area (cm^2)**	**Volume (liters)**	**Volume (quarts)**
1	cup (footed)	9.5	6.0	221.3	0.2	0.2
2	bowl (footed)	12.5	5.5	328.2	0.5	0.5
3	cup	9.0	3.5	164.9	0.2	0.2
4	cup	9.5	4.0	170.2	0.1	0.1
5	bowl	23.0	7.0	786.8	2.1	2.2
6	plate	24.0	3.5	566.8	0.8	0.9
8	bowl	19.0	6.0	457.0	0.9	1.0
11	bowl	13.0	5.5	238.9	0.3	0.3
12	plate	28.0	5.0	799.9	1.8	1.9
23	jar (miniature)	4.5	5.5	99.4	0.1	0.1
25	bowl (footed)	11.5	4.5	212.7	0.2	0.2
27	pan	33.0	11.0	1,395.5	5.5	5.8
33	pan	41.0	13.5	2,049.6	9.8	10.3
36	pan	31.0	10.8	1,192.2	4.1	4.3
39	bowl	15.5	7.0	457.5	0.9	1.0
40	pan	32.0	13.0	1,562.4	7.3	7.7
41	pan	34.0	12.0	1,426.4	5.6	6.0
42	bowl	22.5	6.5	598.5	1.4	1.4
47	jar	13.0	17.5	936.8	2.1	2.3
48	bowl	16.0	5.5	356.8	0.7	0.7
49	bowl	22.0	8.0	675.1	1.8	1.9
50	bowl	18.0	6.5	416.2	0.8	0.9
51	pan	4.05	21.0	3,139.0	19.2	20.2
52	cup (cylindrical)	6.5	6.5	145.9	0.1	0.1

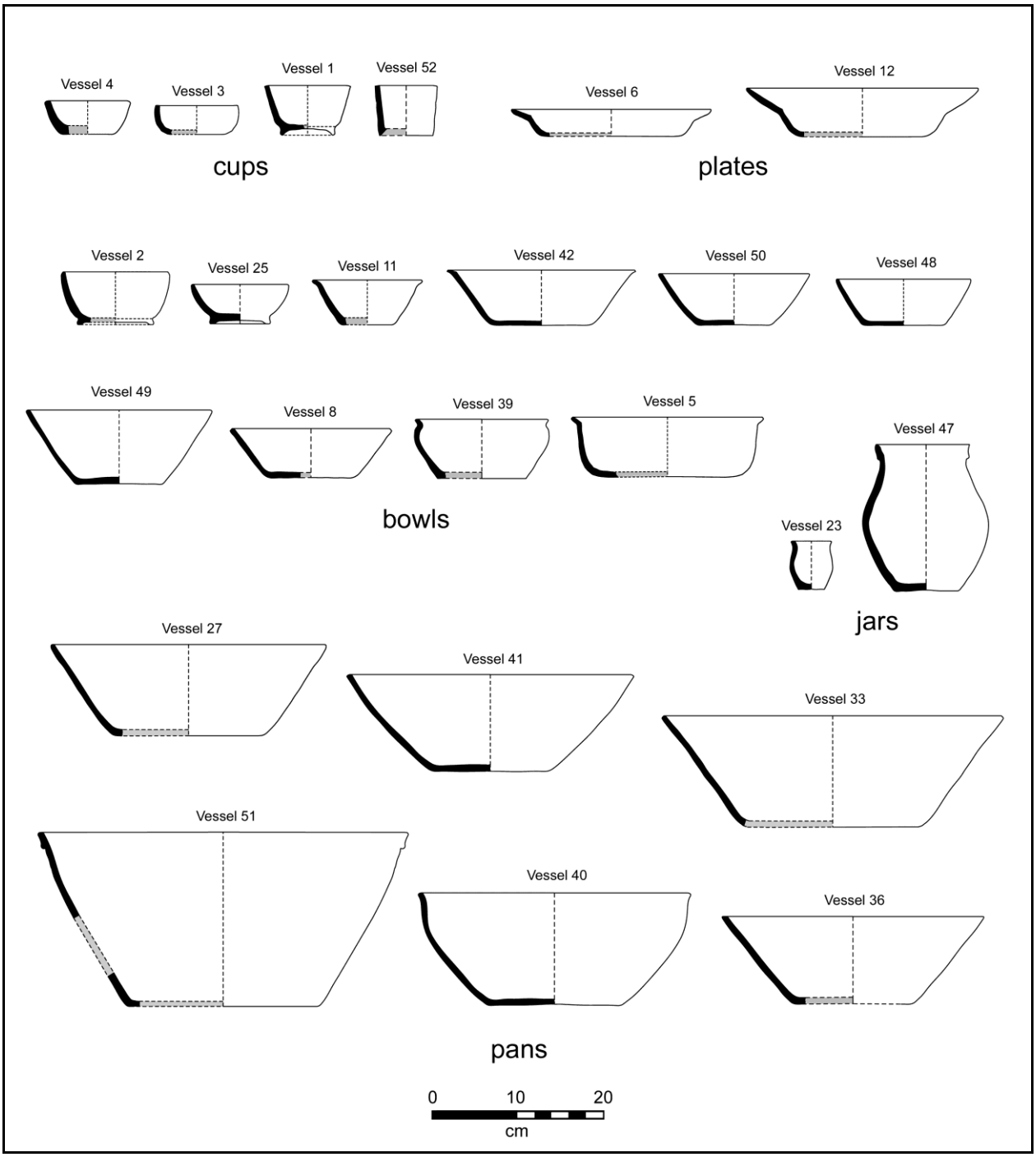

Figure 6.10. Vessel forms represented in the Catawba coarse earthenware assemblage at Ayers Town. A possible pitcher or teapot form, represented by Vessel 60, is not sufficiently complete to render an overall vessel profile.

cm^2 and, when divided by the average vessel surface area (766 cm^2), indicates an estimate of 658 vessels for the site, or an average of about 130 vessels for each of the five residential complexes during the site's approximately 20-year occupation. While this approach obviously rests upon several unsubstantiated assumptions, it is useful in indicating the general scale of the Ayers Town vessel assemblage.

Sherd Thickness

The vessel wall thickness represented by sherds greater than 2 cm in diameter was measured to the nearest millimeter. The 3,940 measured sherds ranged from 2 mm to 14 mm in thickness with 94% being normally distributed between 4 mm and 8 mm thick ($\bar{x}$=6.3, s.d.=1.3). Inspection of large sherds and vessel sections indicates that most vessel walls maintained a uniform thickness (see Figure 6.10 and profiles drawings in Appendix B). An analysis of 53 vessel sections for which rim diameter could be determined shows that larger vessels tend to have slightly thicker walls; however, the strength of this correlation is not high (i.e., Pearson's r=0.47).

Portion of Vessel Represented

Most potsherds greater than 2 cm in diameter (n=4,028) were classified by portion of vessel represented. Recognized vessel portion classes are defined as follows: *rim* (sherd with vessel lip) (n=778, 19.3%); *neck* (sherd with concave exterior surface but no evidence of vessel lip; associated almost exclusively with jars) (n=114, 2.8%); *body* (sherd with convex surface but no evidence of vessel lip or basal edge) (n=2,374, 58.9%); *base-body juncture* (sherd with evidence of the juncture between vessel body and base; 217 exhibit a simple, obtuse-angled juncture from a curved vessel wall to a flat base, and one has a right-angled juncture) (n=218, 5.4%); *base* (pot base fragment characterized by lack of curvature) (n=483, 12.0%); *base with foot ring* (pot base fragment with evidence of a foot ring or thickened pedestal) (n=37, 0.9%); *handle* (23 are fragments of curved, cylindrical loop handles, and two are disk-like pot lid handles) (n=25, 0.6%); *handle attachment* (body, neck, or rim sherd with evidence of a riveted handle attachment) (n=3, 0.1%); and *pode* (a cylindrical pot leg) (n=2, 0.1%). Specific types of rim configuration and lip treatment are considered in greater detail below.

A total of 13,100 small (i.e., less than 2 cm diameter), heavily eroded, or fragmented sherds were classified as *indeterminate*.

Temper

In his description of Catawba clay mining and paste preparation, Harrington (1908:402–403) noted that potters were careful to remove all "foreign substances" from the clay as it was being dug up and that no aplastic material, or temper, was added as the paste was being prepared from a mixture of fine-grained pipe clay and coarser-grained pan clay. The fact that many of the Ayers Town potsherds contain sand of varying particle sizes and occasional small rock fragments (mostly quartz) suggests that, while temper may not have been intentionally added to clay, the natural occurrence of sand or grit in pan clays served to "temper" the clay. As Mooney noted, the pan clay used by Sally Wahuhu and Susanna Owl "contains sand so coarse as to give it a gritty texture" (Holmes 1903:53). Figure 6.11 illustrates some of the variation observed in ceramic pastes at Ayers Town.

During analysis, observations were systematically recorded for paste texture, the occurrence of aplastic inclusions, and overall paste color. Of the 3,993 sherds greater than 2 cm in diameter that were coded for texture, about 10% (n=384) were rough to the touch and had a gritty texture.

Figure 6.11. Edges of five sherds from Feature 3 showing variation in ceramic paste: paste containing little or no inclusions (a–c); paste with a large quartz inclusion (c); and paste with coarse sand inclusions (d).

This tactile characteristic resulted from the inclusion of sand of varying particle size within the paste; however, only 42 of these sherds contained clearly visible grit inclusions. Of the 771 sherds that could be classified by vessel type (primarily rim sherds, basal sherds, and other non-diagnostic sherds that comprise larger, identifiable vessel sections), coarse-textured sherds represent 9.6% of jar fragments (8 of 83 sherds) and 7.2% of pan fragments (16 of 221 sherds). These two vessel classes represent the primary utilitarian (i.e., cooking and storage) wares at the site. Conversely, coarse-textured sherds represent only 1.9% (9 of 467 sherds) of all other vessel categories, including tablewares such as bowls, cups, and plates. The great majority (90%) of all sherds from Ayers Town, and for all vessel classes, have a fine texture (i.e., they are smooth to the touch) and contain either fine sand or very fine sand. The 52 fine-textured sherds that contained visible aplastic inclusions represent only 1.4% of all fine-textured sherds. The paste difference between wares with a coarse texture and those with a fine texture can likely be attributed to different proportions of pipe clay and pan clay mixed together to form the potter's paste.

Finally, while most sherds exhibited paste colors that ranged from reddish brown to light yellowish brown, 99 sherds were identified that were light gray to very pale brown in color. These include Vessels 2, 6, and 9, and may represent clay from a separate source. A much greater proportion of sherds from Old Town I contexts at Old Town were made using a similar paste, suggesting that it may be associated largely with Catawba ceramics of the 1760–1780 period. These sherds, when decorated, were painted with a dark brown pigment rather than with red sealing wax. Conversely, sherds with this paste were not observed at the later site of New Town. The 20 "pale-bodied" vessels identified by sherds from Ayers Town (including Vessels

2, 6, and 9) include 13 bowls, two cups, two plates, two jars, and a loop handle from a bowl or cup.

In a recent study, Rosanna Crow (2011) examined the mineral composition of potter's clays and pottery fragments from archaeological contexts at Ayers Town and Old Town and the composition of clays from the Catawbas' modern clay pits at Nisbet Bottoms, located along Catawba River midway between the two sites. Her research questions were to determine if potters from the two late eighteenth-century sites were obtaining their clays from a similar source and, if so, to determine if that source was the same one used by Catawbas today. Using x-ray diffraction to analyze clays and x-ray fluorescence to analyze both clays and pottery fragments, she identified four distinct clay sources and found that two of those sources were likely shared by both Old Town and Ayers Town potters. One of those shared sources may have been Nisbet Bottoms, but it also is possible that it was a different but geologically similar deposit of alluvial clays along Catawba River.

Surface Treatment and Color

Each sherd greater than 2 cm in diameter was classified by exterior surface finish, exterior smudging, and interior smudging. All sherds at Ayers Town, as well as at other Catawba sites known to post-date 1760, have plain exteriors; surface treatments present on earlier Catawba ceramics, such as cord-marking, corncob-impressing, and stamping with a carved paddle, are absent. Instead, the variation in surface treatment relates to the degree to which a vessel's exterior was smoothed and burnished, and this variation bears a general relationship to both a vessel's intended function (i.e., cooking, storage, or serving) and the post-depositional processes affecting the condition of the archaeological specimen. Burnishing is easily recognized on most sherds by the presence of facets produced by rubbing with a burnishing stone and a sherd surface that is extremely smooth or slick to the touch. Because of ambiguity in distinguishing between smoothed, burnished but weathered, and burnished surfaces, sherds with these surfaces were classified simply as *smoothed/burnished*. A few sherds were burnished to such a high degree that a glossy polish was attained; these were classified as *polished*.

Most pots at Ayers Town, as well as at other post-1760 Catawba sites, were smudged. Smudging was sometimes used to produce a uniformly black finish on a vessel; however, it more commonly was used as a way of waterproofing a vessel's interior surface (see discussion of smudge pits in Chapter 5). Among 3,916 sherds with smoothed/burnished exteriors, only 14% were also smudged on the exterior surface; however, 86% of these sherds had smudged interiors. Of the 28 sherds with polished surfaces, 86% had smudged exteriors and 93% had smudged interiors (Table 6.8).

Sherd color was highly variable, and this variation can be attributed to paste type, firing practice (reflected by the presence or absence of fire-clouding), and intentional alteration of the surface through smudging. Dominant surface color was classified using Munsell soil color charts for the 60 numbered vessels and provides an estimate of the range in colors within the overall assemblage. As shown in Table 6.9, these colors range from yellowish red to brown on un-smudged exteriors and dark gray to black on smudged surfaces. See Appendix B for examples of surface treatments, smudging, and paste colors.

Table 6.8. Distribution of Potsherds by Exterior Surface Treatment, Exterior Finish, and Interior Finish.

Exterior Surface	Exterior Finish	Interior Finish	Total	%
Smoothed/Burnished	Unmodified	Unmodified	529	13.4
Smoothed/Burnished	Unmodified	Smudged	2,825	71.6
Smoothed/Burnished	Smudged	Unmodified	33	0.8
Smoothed/Burnished	Smudged	Smudged	529	13.4
Polished	Unmodified	Unmodified	2	0.1
Polished	Unmodified	Smudged	2	0.1
Polished	Smudged	Smudged	24	0.6
Total			3,944	100.0

Table 6.9. Range of Dominant Exterior Surface Colors on 60 Numbered Catawba Earthenware Vessels at Ayers Town.

Munsell	Description	Total	Munsell	Description	Total
5YR 5/6	yellowish red	2	10YR 5/6	yellowish brown	4
7.5YR 5/4	brown	1	10YR 5/8	yellowish brown	3
7.5YR 5/6	strong brown	2	10YR 6/2	light brownish gray	5
7.5YR 5/8	strong brown	1	10YR 6/3	pale brown	4
7.5YR 6/6	reddish yellow	5	10YR 6/4	light yellowish brown	5
7.5YR 7/6	reddish yellow	1	10YR 6/6	brownish yellow	4
10YR 2/1	black (smudged)	1	10YR 7/1	light gray	1
10YR 3/1	very dark gray (smudged)	1	10YR 7/2	light gray	2
10YR 4/1	dark gray (smudged)	1	10YR 7/3	very pale brown	5
10YR 5/2	grayish brown	3	10YR 7/4	very pale brown	3
10YR 5/3	brown	1	10YR 7/6	yellow	1
10YR 5/4	yellowish brown	3	10YR 8/3	very pale brown	1
				Total	60

Sherd Curvature

Given that the ceramic assemblage at Ayers Town appears to be comprised almost exclusively of vessels that had flat bases, coding for sherd curvature is a useful way to differentiate between body (curved) and basal (flat) sherds in the absence of other diagnostic features. Of the 3,988 sherds sufficiently large enough to determine curvature, 86% were curved and 14% were flat.

Vessel Rim and Lip Configuration

The 776 rim sherds in the sample were classified by rim configuration and lip shape. Rim configuration refers to the overall vessel profile below the lip, while lip shape refers to the form or treatment of the lip edge. Rim classes include: excurvate (21.0%), straight (44.3%), incurvate (28.7%), incurvate with straight vertical rim (0.4%), and indeterminate (5.5%) (Figure 6.12). Excurvate rims are largely associated with jars, bowls, and plates; straight and incurvate rims

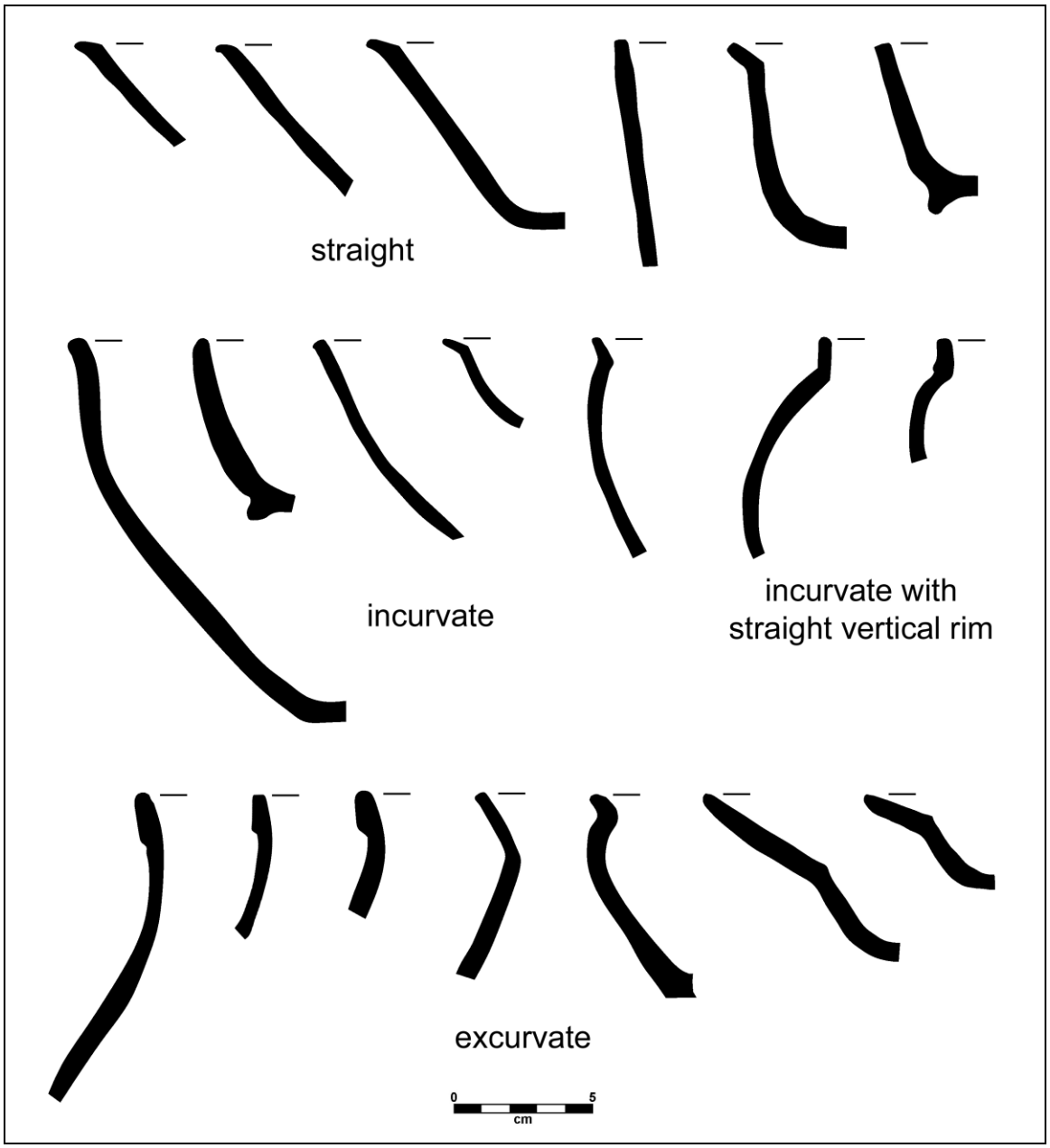

Figure 6.12. Rim forms represented in the Ayers Town ceramic assemblage.

occur mostly on pans, bowls, and cups. The three sherds classified as *incurvate with straight vertical rim* are from two restricted-mouth jars (Vessels 16 and 29).

Vessel lip classes include: rounded (28.5%), flattened (28.0%), tapered (1.4%), folded or thickened (9.0%), faceted interior (11.9%), beveled interior (15.1%), beveled interior with edge facets (0.5%), faceted edge (1.0%), and indeterminate (4.6%) (Figure 6.13). Most *jars* have folded or thickened lips; however, more than 20% have simple flattened or rounded lips. Lip thickening is a vessel characteristic that is reminiscent of earlier Catawba-made jars which have pronounced, notched or punctated rim strips. Rim strips strengthened the rim of a vessel, and their use at Ayers Town undoubtedly served a similar function. With the exception of a single vessel (Vessel 59) with incisions along the rim fold and a sherd with punctations along the lower

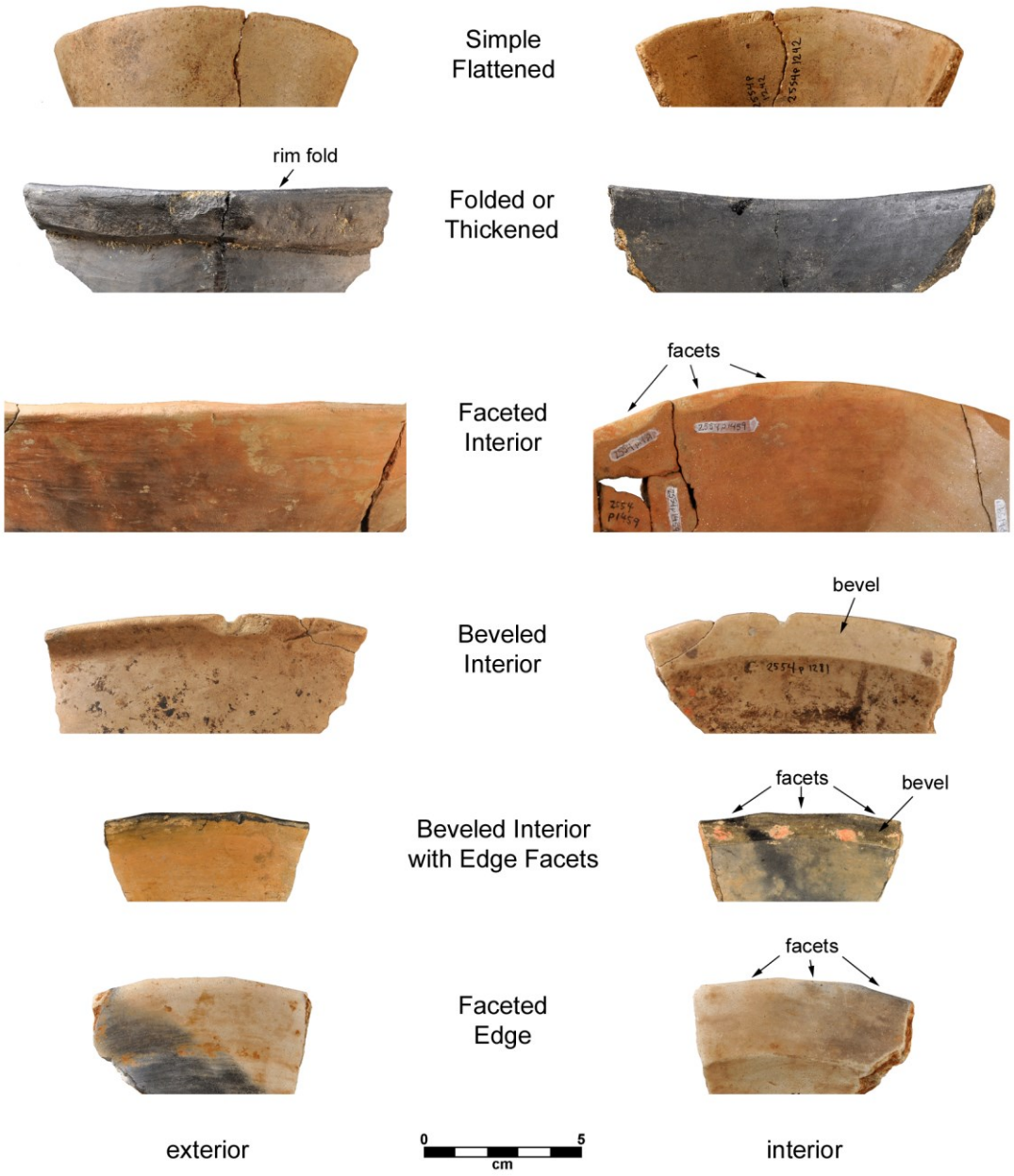

Figure 6.13. Examples of vessel lip classes represented in the Ayers Town ceramic assemblage.

edge of the rim fold, all rim sherds from Ayers Town with folded or thickened lips are undecorated. The practice of adding a strip of clay to the outer rim of jars continues at New Town; however, those rim strips, or collars, are barely detectable except for the presence of a low ridge at the bottom edge of the thickened rim (see Riggs et al. 2006:72–73). *Pans* largely have simple flattened or simple rounded lips; the six pan rim sherds with a folded or thickened lip are all from the same vessel (Vessel 51). This treatment apparently was necessary to reinforce the rim of this very large pan. *Bowls* are evenly divided between those with simple rounded or flattened lips (n=79, 30.2%), lips with faceted interiors (n=89, 34.0%), and lips with a beveled interior (n=87, 33.2%). Five bowls with beveled interior lips also have a faceted, or

Table 6.10. Distribution of Rim Sherds by Rim Configuration, Lip Shape, and Vessel Class.

Rim Attribute	Jar	Pan	Bowl	Cup	Plate	Bottle	Indet.	Total	%
Rim Configuration									
Excurvate	66	1	48	1	12	-	35	163	21.0
Straight	7	103	134	5	-	-	95	344	44.3
Incurvate	1	32	77	11	-	1	101	223	28.7
Incurvate (with vertical rim)	3	-	-	-	-	-	-	3	0.4
Indeterminate	-	-	3	-	-	-	40	43	5.6
Total	77	136	262	17	12	1	271	776	100.0
Lip Shape									
Simple Rounded	6	28	49	7	2	1	128	221	28.5
Simple Flattened	11	104	30	7	2	-	63	217	28.0
Simple Tapered	1	1	2	1	-	-	6	11	1.4
Folded or Thickened	59	2	3	1	-	-	5	70	9.0
Faceted Interior	-	-	89	-	-	-	3	92	11.9
Beveled Interior	-	-	83	1	-	-	33	117	15.1
Beveled Interior with Edge Facets	-	-	4	-	-	-	-	4	0.5
Faceted Edge	-	-	-	-	8	-	-	8	1.0
Indeterminate	-	1	2	-	-	-	33	36	4.6
Total	77	136	262	17	12	1	271	776	100.0
Percent	9.9	17.5	33.8	2.2	1.6	0.1	34.9	100.0	

scalloped, lip edge. Fourteen of the 17 *cups* have simple rounded or flattened lips, while all of the dozen *plates* also have simple rounded or flattened lips. Eight plates also have faceted, or scalloped, lip edges. Finally, the one possible *bottle* rim sherd in the sample has a simple rounded lip. The distribution of rim sherds by rim configuration, lip shape, and vessel class is presented in Table 6.10. Rim sherds exhibiting similar configurations and lip shapes also have been recovered from contexts dating between 1760 and 1820 at Old Town and New Town (Plane 2011; Riggs et al. 2006).

Decoration

Catawba-made vessels from sites dating between 1760 and 1820 usually were not modified beyond simple stylistic treatments to the vessel lip, such as faceting or beveling; sherds from vessels with additional decorative treatment do not exceed 8% of an assemblage. Table 6.11 situates the Ayers Town ceramic assemblage among the other excavated assemblages from Catawba sites within this time period with respect to kinds and frequency of decorative treatment. With the exception of Old Town I (c. 1761–1780) contexts at Old Town, where decorations using a dark brown or black pigment are much more common, most decorations represented in these assemblages consist overwhelmingly of painted designs or rim treatments using a red pigment. And, there is both a general decline over time in the decoration of Catawba earthenware vessels and an increasing restriction of decoration to the vessel lip.

Table 6.11. Comparison of Kinds and Frequency of Decorative Treatments on Catawba Earthenware Sherds (>2 cm in diameter) from Ayers Town, Old Town, and New Town.[1]

	Rim Sherds		Non-Rim Sherds		Total	
Site / Decoration Types	**N**	**%**	**N**	**%**	**N**	**%**
Old Town I (c. 1761–1780)						
Decorated Sherds	38	16.4	45	5.2	83	7.6
Undecorated Sherds	194	83.6	814	94.8	1008	92.4
Total	232	100.0	859	100.0	1091	100.0
Decoration Types						
Painted (red)	20	52.6	12	26.7	32	38.6
Painted (black/brown)	18	47.4	33	73.3	51	61.4
Total	38	100.0	45	100.0	83	100.0
Old Town II (c. 1781–1800)						
Decorated Sherds	20	10.5	3	0.4	23	2.3
Undecorated Sherds	171	89.5	828	99.6	999	97.7
Total	191	100.0	831	100.0	1,022	100.0
Decoration Types						
Painted (red)	18	90.0	2	66.7	20	87.0
Painted (black/brown)	2	10.0	1	33.3	3	13.0
Total	20	100.0	3	100.0	23	100.0
Ayers Town (c. 1781–1800)						
Decorated Sherds	53	6.8	8	0.2	61	1.5
Undecorated Sherds	725	93.2	3242	99.8	3967	98.5
Total	778	100.0	3250	100.0	4028	100.0
Decoration Types						
Painted (red)	41	77.4	8	100.0	49	80.3
Painted (black/brown)	6	11.3	-	-	6	9.8
Incised	1	1.9	-	-	1	1.6
Punctated	5	9.4	-	-	5	8.2
Total	53	100.0	8	100.0	61	100.0
New Town (c. 1790–1820)						
Decorated Sherds	238	7.5	46	0.2	284	1.3
Undecorated Sherds	2,919	92.5	19,290	99.8	22,209	98.7
Total	3,157	100.0	19,336	100.0	22,493	100.0
Decoration Types						
Painted (red)	232	97.5	36	78.3	268	94.4
Painted (black/brown)	6	2.5	9	19.6	15	5.3
Incised	-	0.0	1	2.2	1	0.4
Total	238	100.0	46	100.0	284	100.0

[1]Twenty-three decorated sherds from Ayers Town that are less than 2 cm in diameter have been excluded from this table.

Only 84 sherds from Ayers Town (i.e., 0.5% of all sherds or 1.5% of all sherds greater than 2 cm in size) were decorated. These sherds represent a maximum of 39 vessels and were decorated by painting (n=62), applying a reddish brown slip to the interior vessel surface (n=11), incising (n=4), or punctuating (n=7). Painted vessels were decorated using two types of pigment, and on most sherds from these vessels only traces of the original decoration remain. The most common decorative treatment used at Ayers Town and other post-1760s Catawba sites involved brite red sealing wax, which was heated and applied to the vessel rim and occasionally to the vessel's interior surface (Figure 6.14). This treatment usually is associated with vessels having smudged interiors. Fifty-five sherds representing a maximum of 25 vessels (all bowls) were decorated in this manner. Of these, 26 are rim sherds that exhibited painted dashes along the simple lip edge (n=1), on lip facets (n=20), or along the rim bevel (n=7). Eleven other rim and body sherds exhibited painted dots along the rim bevel (n=9) or interior vessel surface (n=2). Finally, 11 rim sherds and five body sherds exhibited unidentifiable traces of red paint along the lip edge, rim bevel, or interior vessel surface. Faint traces of painted red slip also were observed on the interior surfaces of seven bowl fragments.

Seven sherds representing a maximum of six vessels (bowls and plates) were decorated with a dark brown or black paint, ink, or dye (Figure 6.15). Sherds decorated in this manner comprised almost half of all painted sherds from pre-1780 contexts at Old Town, but they rarely occur in later Catawba contexts. Five of these are rim sherds with faint lines or swags on the interior rim surface; the other two are rim sherds with painted dots on the surface of the rim bevel. Decorations of this type using dark brown and black pigments are thought to have been inspired by those commonly found on English slipwares during the mid-eighteenth century and usually are found on un-smudged vessels with a light gray to very pale brown paste. Four other sherds exhibit a reddish orange slip that was applied to the vessel interior; however, they are too small to determine vessel type.

The three incised sherds are from a single jar (Vessel 59) and represent a folded rim with an incised zigzag line along the rim exterior. Another rim sherd is from a small jar with a folded rim and short incisions along the top and bottom edges of the fold. Six of the seven punctated sherds are from a single bowl (Vessel 18) that was decorated along its beveled rim with a series of punctated arcs. Both vessel decorations are unique within excavated Catawba ceramic assemblages. The other punctated sherd is from the rim of a jar that has a rim fold with irregular punctations along lower edge of the fold. This type of rim treatment is similar to the predominant rim form seen on jars at Nassaw-Weyapee and Charraw Town; however, it too is unique within the excavated ceramic assemblages from Ayers Town, Old Town, and New Town.

Appendages

Twenty-seven fragments of vessel appendages were recovered. Twenty-three of these were pieces of rounded-loop or flattened-loop handles that would have been riveted to the pot exterior and represent a maximum of 15 different handles. While no vessel fragments were recovered with attached handles, one jar rim (Vessel 44) was found that exhibited a scar where a handle had been attached (Figure 6.16k). Interestingly, no vessel fragments with attached handles have been found at any of the sites excavated by UNC's Catawba Project. It is likely that the 14 handle fragments with buff, un-smudged exteriors are from jars; the nine other handle fragments have smudged and polished exteriors, and these may be associated with pitchers or teapots.

Figure 6.14. Examples of bowl rims from Ayers Town decorated with red dashes (c, h) and dots (a–b, d–g).

Figure 6.15. Potsherds from Ayers Town decorated with: dark brown or black dots (a, d, f) and lines (b–c), red dots and line (e), punctations (g, j), incisions (h–i), and reddish orange slip on the interior surface (k).

Eight of these polished handle fragments came from a single feature (Feature 155) (Figure 6.16e–f), while fragments of a polished vessel (Vessel 60) thought to represent the base of a pitcher or teapot were recovered from an adjacent context, Feature 163. Both features are interpreted as sub-floor storage pits within the same structure (i.e., Structure Locality 11 within Residential Complex E).

Two lid handles were recovered from Features 5 and 185 (Figure 6.16h–i). The specimen from Feature 5 has a black, polished exterior and may be from a teapot; the other has a buff exterior, was crudely made, and may be from a bowl or jar lid. No other sherds were found that could be clearly identified as representing lids.

Finally, two podes, or pot legs, were recovered from Feature 190 and from plowed soil overlying Feature 72. The specimen from Feature 190 is large (i.e., 37 cm in diameter) compared to other podes recovered at Old Town and New Town, and it likely supported a large jar (Figure 6.16j). The other specimen is a heavily eroded fragment. Similar loop handles, lid handles, and podes have also been recovered at Old Town and New Town, and both loop handles and podes also have been found at Nassaw-Weyapee.

Figure 6.16. Vessel appendages from Ayers Town: loop handles (a–g), lid handles (h–i), pode (j), and loop handle attachment on jar rim (k).

Vessel Types

Five primary vessel types are represented at Ayers Town: jars, pans, bowls, cups, and plates. Other types represented by sherds in the sample include: a crudely made bottle spout, a possible pitcher or teapot base, a perforated base from a footed colander, and two vessel lid handles. Each of these types is defined by a unique combination of morphological and stylistic attributes.

Table 6.12. Summary of Ayers Town Potsherds Identified by Vessel Type and Broken Down by Sherd Type.

Vessel Type	Rim	Neck	Body	Base-Body Juncture	Base	Base With Foot Ring	Handle	Indeter-minate	Total Sherds	Total Vessels[1]
Jar	77	5	24	2	-	-	-	-	108	57
Pan	139	-	47	15	27	-	-	-	228	103
Bowl	304	1	76	26	12	13	-	14	446	223
Cup	17	-	6	3	2	-	-	2	30	17
Plate	12	1	1	-	2	-	-	-	16	9
Bottle	1	-	-	-	-	-	-	-	1	1
Teapot?	-	-	-	-	1	6	-	-	7	1
Colander	-	-	-	-	-	1	-	-	1	1
Lid	-	-	-	-	-	-	2	-	2	2
Total	550	7	154	46	44	20	2	16	839	414

[1]Maximum number of vessels represented.

Eight hundred and thirty-nine sherds were identified as to probable vessel type based on diagnostic characteristics such as rim and lip form, overall vessel size (as estimated by orifice diameter), and presence and type of decorative treatment. Non-diagnostic sherds also were classified by vessel type when they refit to diagnostic sherds. These represent a maximum 414 vessels (Table 6.12). Overall, the Ayers Town vessel assemblage bears strong similarity to the Catawba earthenware assemblages documented at Old Town and New Town, and all vessel forms are represented in the ceramic collections from those sites (Davis and Riggs 2004; Plane 2011; Riggs 2010; Riggs et al. 2006).

Jars. Jars have a globular form and a restricted orifice created either by a recurvate, flaring rim, or by a straight, vertical rim (Figure 6.17). One hundred and eight sherds were identified as belonging to jars and represent a maximum of 57 vessels. A majority of jars (59 of 77 rim sherds) have rims which have been reinforced by a rim fold or added rim strip. Both largely complete jars (i.e., Vessels 23 and 47) have flat, simple bases, and all other jars are assumed to have had similar bases, as no curved basal fragments were identified in the Ayers Town ceramic sample. Eighty-four percent of sherds attributed to jars have smudged interiors. Except for a small jar with an incised decoration along the rim fold (Vessel 59) and a jar rim sherd with punctations along the lower rim fold edge, jars were not decorated. Large jars probably were used for both cooking and storage.

Ten jar rim sherds and reconstructed rim sections were large enough to provide information about overall vessel size. Vessel orifice diameters ranged from 4.5 cm to 28 cm ($\bar{x}$=16.1, s.d.=6.5, n=10), with half being larger than 18 cm (Table 6.13). Although the two largely complete jars vary greatly in size (i.e., Vessel 23 is 4.5 cm in diameter and Vessel 47 is 13 cm in diameter), they share a common morphology which is reflected by a similar ratio of rim diameter to base diameter (1.5:1 and 1.7:1, respectively) and the same ratio of rim diameter to vessel height (0.8:1). Assuming that this common morphology extends over all size classes, the largest jars (with orifice diameters exceeding 25 cm) may have had capacities exceeding 20 liters (or about five gallons).

Figure 6.17. Reconstructed jars and jar rims from Ayers Town.

Table 6.13. Summary of Vessel Size and Morphology Measurements.[1]

Vessel Statistics	Rim Diameter	Base Diameter	Height	Thickness	Rim-to-Base Ratio	Rim-to-Height Ratio
Jars						
range	4.5–28.0	3.1–7.7	5.5–7.3	4–7	1.5–1.71	0.8–0.8
mean	16.1	5.4	11.4	4.9	1.6	0.8
s.d.	6.5	2.3	5.9	0.9	0.1	0.0
n	10	2	2	10	2	2
Pans						
range	31.0–45.0	14.0–23.0	10.8–21.0	5–8	1.9–2.4	2.5–3.0
mean	34.5	17.6	13.6	6.4	2.1	2.8
s.d.	5.6	3.4	3.5	0.8	0.2	0.2
n	10	6	6	11	5	5
Bowls						
range	11.0–31.0	4.2–18.1	4.5–8.0	4–7	1.3–2.1	2.2–3.5
mean	18.1	8.8	6.2	5.0	1.8	2.8
s.d.	5.3	3.3	1.0	0.7	0.3	0.4
n	24	16	10	28	13	10
Cups						
range	6.0–9.5	4.7–6.9	3.5–6.5	4–6	1.2–2.0	1.2–2.6
mean	8.3	6.1	5.0	5.0	1.2	1.9
s.d.	1.4	0.8	1.3	0.9	0.7	0.6
n	5	4	4	5	5	4
Plates						
range	22.0–33.0	15.2–16.5	3.4–5.0	5–7	1.5–1.9	5.6–7.2
mean	26.8	15.9	4.2	5.5	1.6	6.3
s.d.	4.2	0.6	0.8	0.9	0.2	0.7
n	4	2	2	4	2	2

[1]Rim diameter, base diameter, and height measured in centimeters; thickness measured in millimeters. Vessel 51 was excluded from summaries of pan measurements.

Pans. Pans are large, sub-conical vessels with straight, slightly incurvate, or slightly excurvate sides that attach to a flat base at an obtuse angle (Figure 6.18). Pan rims usually are unmodified and undecorated; however, one extremely large pan (Vessel 51) was constructed with an added clay strip to reinforce the rim. The pan form appears in Catawba ceramic assemblages after 1760 and is a dominant vessel type at Old Town and New Town. As with large jars, pans likely were used primarily for cooking. Pans have thick walls that usually exceed 6 mm in thickness and, as a class, are the largest vessels in the Ayers Town assemblage. Most pans (96%) also have smudged interiors. Vessels of similar size and morphology were produced by Moravian potter Gottfried Aust at Bethabara during the decades before the American Revolution and are illustrated by South (1999:227). One stylistic difference is that Aust's pans have folded rims and an applied, secondary ring of clay to reinforce the rim.

Two hundred and twenty-eight sherds were identified as belonging to pans and represent a maximum of 103 vessels. The 11 pan rims and rim sections providing information about vessel size and morphology represent vessels with: rim diameters of 26 cm to 45 cm ($\bar{x}$=34.5, s.d.=5.6, n=10); base diameters of 14 cm to 23 cm ($\bar{x}$=17.6, s.d.=3.4, n=6), and vessel heights of 11 cm to

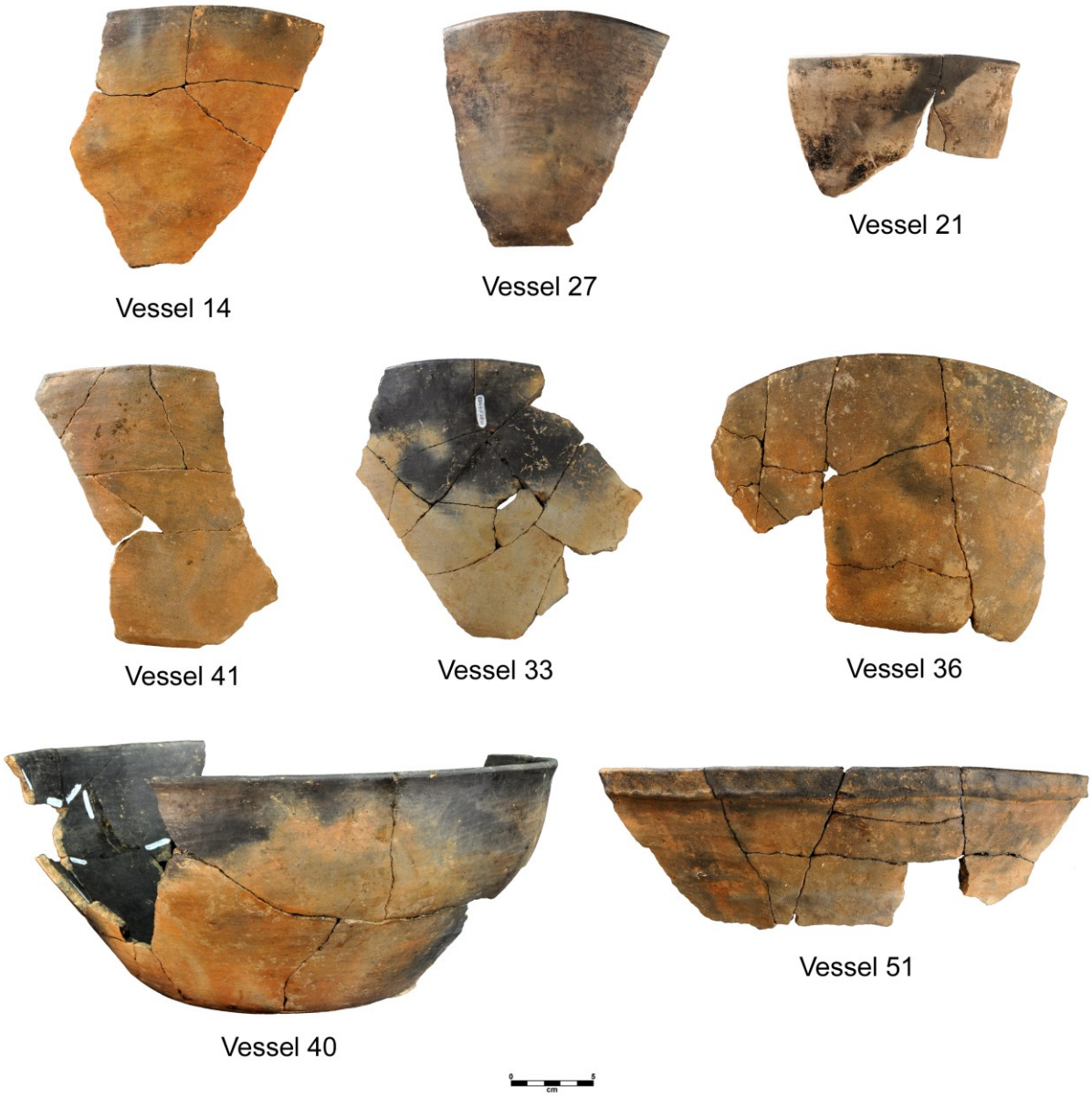

Figure 6.18. Reconstructed pans and pan rims from Ayers Town.

21 cm ($\bar{x}$=13.6, s.d.=3.5, n=6) (Table 6.13). If Vessel 51, an unusually large pan with a reinforced rim, is excluded from consideration, then the remaining measured pans display a remarkable uniformity in morphology. Rim-diameter-to-base-diameter ratios for these vessels range from 1.9:1 to 2.2:1 ($\bar{x}$=2.1, s.d.,=0.2, n=5), and rim-diameter-to-vessel-height ratios range from 2.5:1 to 3.00:1 ($\bar{x}$=2.8, s.d.=0.2, n=5). The smallest pans had a capacity of about 2.6 liters (2.75 quarts), while the largest (Vessel 51) could have held up to 19 liters (about 5 gallons).

Bowls. Bowls are the most common vessel type within the Ayers Town assemblage (Figures 6.19 and 6.20). They are small to medium-sized, sub-conical vessels with straight or slightly inverted sides and have either simple, pedestaled, or footed flat bases. Four hundred and forty-six sherds were identified as belonging to bowls and represent a maximum of 223 vessels.

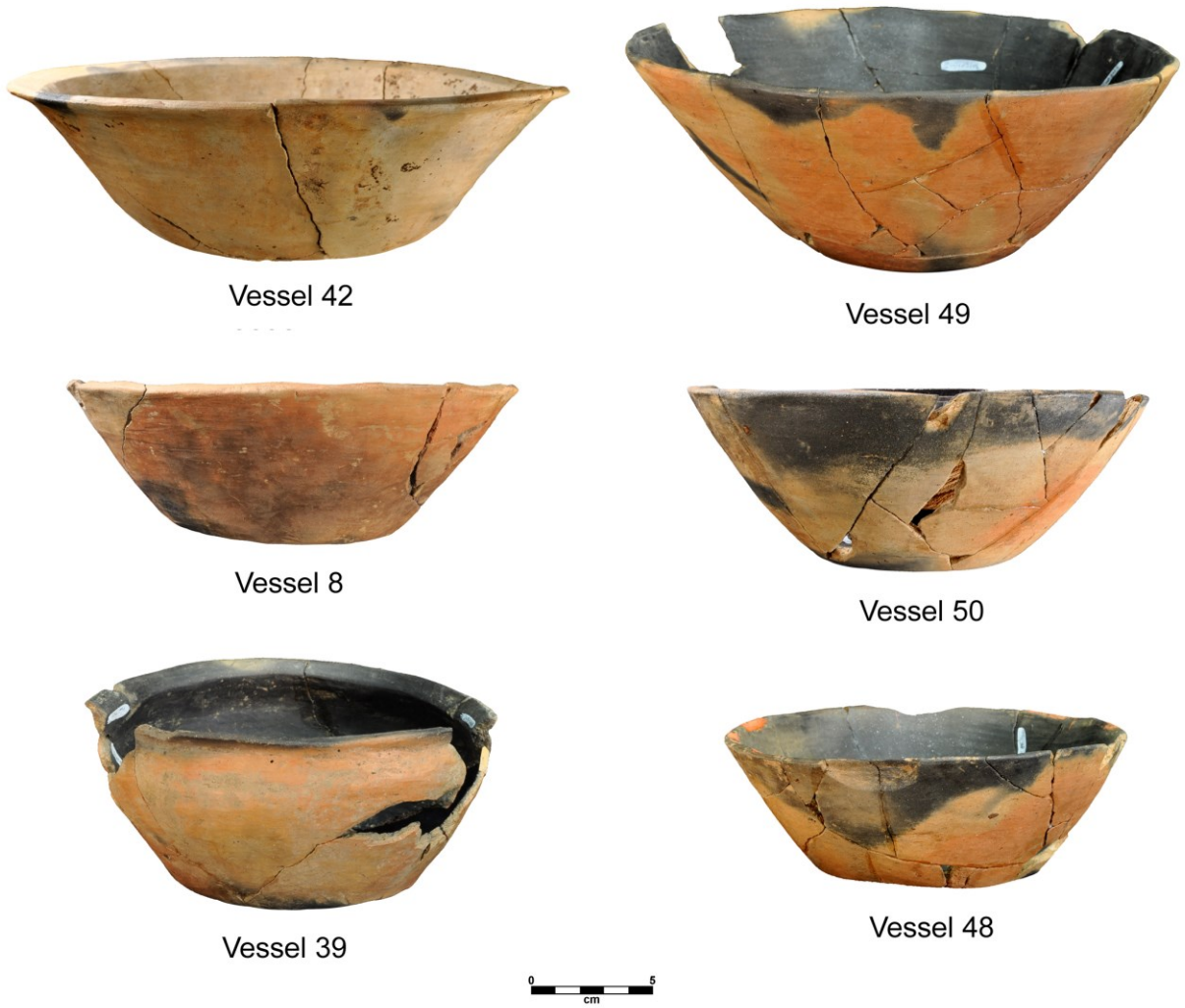

Figure 6.19. Reconstructed bowls from Ayers Town.

Three basic bowl forms are recognized, based on a combination of rim and base treatments: (1) bowls with unmodified rims or rims with interior lip facets and simple, flat bases; (2) bowls with interior-beveled rims and simple, flat bases; and (3) bowls with simple rims and bases with pedestals or foot rings. Bowls within the first category resemble small pans, but they have thinner walls and often exhibit red-painted decoration along the vessel lip. Most of these have smudged interiors. Bowls within the second category—with interior rim bevels—are similar in size but are distinctive in their rim treatment. Several of these bowls also are decorated along the beveled rim surface with paint. Those decorated with red paint always have smudge interiors while those with dark brown or black paint have buff, un-smudged interiors. Finally, bowls within the third category are distinguished by their basal form, but they also appear to have only simple, undecorated rims. Most have smudged interiors. These bowls are smaller than those representing the previous two categories and may represent a functionally distinct class. All bowls likely were used as serving vessels or for individual consumption of meals.

Figure 6.20. Reconstructed bowls with foot rings and bowl rims from Ayers Town.

Of the 28 bowl rims, rim sections, and bases providing information about vessel size and morphology, five represent simple bowls with unmodified or faceted rims, 10 represent simple, beveled-rim bowls, nine represent bowls with footed bases, and four cannot be attributed to a specific bowl type (see Appendix B). As a class, bowls have rim diameters that range from 11 cm to 31 cm ($\bar{x}$=18.1, s.d.=5.3, n=24), base diameters of 4 cm to 18 cm ($\bar{x}$=8.8, s.d.=3.3, n=16), and vessel heights of 4.5 cm to 8 cm ($\bar{x}$=6.2, s.d.=1.0, n=10) (Table 6.13). Proportionally, bowls are short, wide vessels with orifices that are about 1.3–2.1 times greater than basal diameter and 2.2–3.3 times greater than vessel height. Of the bowls for which volume could be calculated, the smallest (Vessel 25) has a capacity of about 0.2 liters (half a pint), while the largest (Vessel 5) has a capacity of about 2.1 liters (just over two quarts).

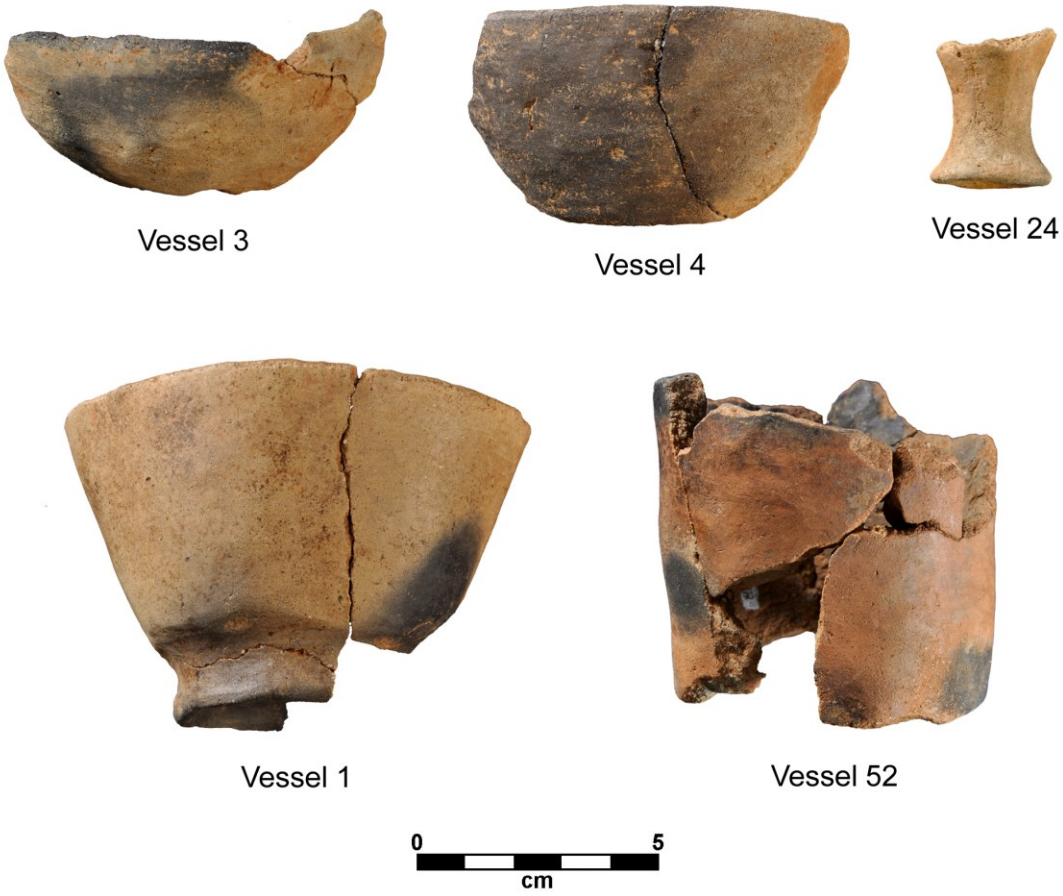

Figure 6.21. Reconstructed cups and cup fragments from Ayers Town.

Cups. Thirty potsherds, representing a maximum of 17 vessels, are attributed to small drinking cups (Figure 6.21). Five of these vessels were complete enough to provide information about overall size and morphology, and reflect a variety of vessel forms. Vessels 3 and 4 have a rounded lip, incurvate sides, and a flat base; Vessel 58 appears to have a similar form. Vessel 1 is a handle-less, London-style cup with straight, slightly flaring sides and a slight shoulder above a footed base. This vessel clearly was inspired by Staffordshire-made teacups and teabowls common during the late eighteenth century. Vessel 52 is a heavy, cylindrical cup with straight, vertical sides and a flat base. Additionally, Vessel 24 appears to be the pedestal base of a small, goblet-style cup. Vessels of a similar form, identified as egg cups, were being produced by Moravian potters at Bethabara during the decades before Ayers Town was occupied (South 1999:221), and Vessel 24 may be a replication of such a vessel. Collectively, these vessels range from 6 cm to 9.5 cm in diameter ($\bar{x}$=8.3, s.d.=1.4, n=5) and 3.5 cm to 6 cm in height ($\bar{x}$=5.0, s.d.=1.3, n=4) (Table 6.13).

Plates. The plate form first appears in historic Catawba ceramic assemblages during the period immediately following the Seven Years War and is represented in the Old Town I (c. 1761–1780) assemblage at Old Town. A 16-sided, buff-colored plate decorated with black-painted swags along the interior rim was recovered from the fill of Feature 2, a large cellar that

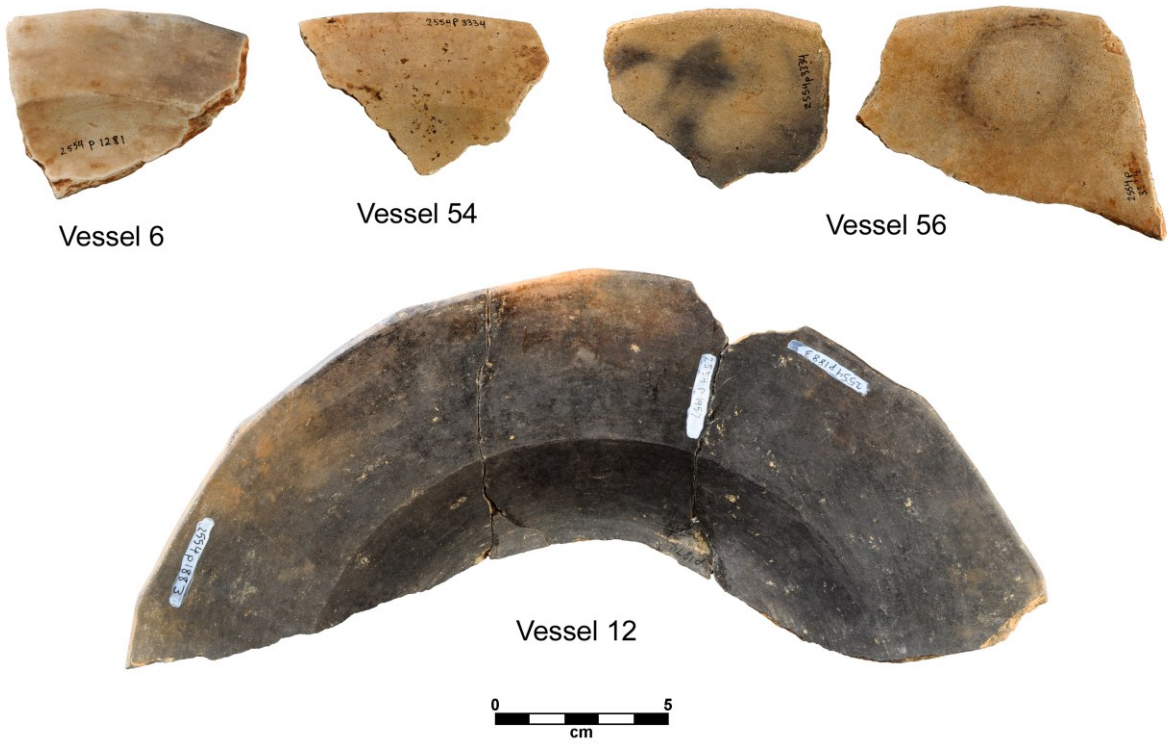

Figure 6.22. Reconstructed plate rim and rim sherds from Ayers Town.

also contained a 1769 Hibernia halfpence, and other contemporary features also produced fragments of similar plates (Davis and Riggs 2004:11–13; Riggs et al. 2006:82).

Only 16 plate fragments, representing a maximum of nine vessels, were identified in the Ayers Town assemblage (Figure 6.22). One of these, a section of a large, multi-sided serving dish or soup plate comprised of five sherds (Vessel 12), is 28 cm in diameter, 5 cm high, and has a smudged interior with a broad, undecorated rim. Three other plates (Vessels 6, 54, and 56) are represented only by rim sherds and measure from 22 cm to 33 cm in diameter. They are not as deep as Vessel 12, and all have a pale body. Vessel 56 also has traces of dark brown paint along the rim. The remaining sherds attributed to plates represent both pale-bodied and interior-smudged vessels of indeterminate size. One of the pale-bodied rim sherds has dark brown-painted swags along the rim, similar to the plate found at Old Town. All pale-bodied plates appear to have multi-sided rims.

Spatial Distribution of Vessels

As with other artifact classes, the distribution of Catawba-made earthenware within feature contexts was uneven, with a relatively small number of features containing a majority of the sample. And, features containing deposits of primary refuse contributed most of the specimens that could be attributed to specific vessel types, while other features contained either very few potsherds or potsherds that were small and heavily eroded. Contexts containing the greatest numbers of potsherds which could be attributed to specific vessel types are: Features 3, 4, 89, and 124 in Residential Complex A; Features 55 and 73 in Residential Complex B; Feature 107 in

Residential Complex C; Features 5, 69, and 123 in Residential Complex D; Features 155, 163, 170, and 185 in Residential Complex E; and Feature 140, a large pit not directly associated with a residential complex. Tables 6.14 and 6.15 present the distribution of potsherds, classified by vessel type, and the maximum numbers of vessels (by type) for features within each of the five identified residential complexes and other aggregated contexts at Ayers Town.

With the exception of Residential Complex A, assemblages within all residential complexes and Feature 140 are dominated by bowl fragments (53.2–74.4%), followed in relative frequency by pans (14.0–40.8%), jars (2.3–17.3%), cups (0.6–13.2%), and plates (0.0–8.1%). Within the Residential Complex A assemblage, pan fragments comprise the majority of identified potsherds (53.7%), followed by bowls (21.5%), cups (13.2%), jars (9.9%), and plates (0.8%). These rankings are the same whether considering numbers of potsherds or maximum numbers of vessels. Feature 3 in Residential Complex A and Feature 69 in Residential Complex D were unique in the greater numbers of cup and plate fragments that they contained, respectively. Otherwise, the relative frequency of vessel types was generally consistent between residential complexes as well as the individual features within those complexes.

While bowls clearly appear to dominate the overall assemblage, it should be pointed out that, because of the unique rim treatments, decorations, and basal forms associated with this vessel type, bowl sherds were easier to identify within the ceramic sample and thus are better represented than other vessel types. Also, several partially or completely reconstructed bowls were found in a few features, most notably Features 140 and 155. Conversely, only single examples of pans and jars (both utilitarian wares) could be largely or completely reconstructed, and most non-rim sherds from vessels of these two types could not be attributed to vessel type because of a lack of diagnostic characteristics. Further analysis of potsherds from individual feature contexts might be able to associate non-conjoining with specific vessels based on paste, color, curvature, and thickness attributes; however, this was not attempted for the present study.

Other Food Preparation and Consumption Activity Artifacts

Other artifacts associated with food preparation and consumption activities include: glass, ceramic, cast iron, tin-plated iron, and brass container fragments of European and Euroamerican manufacture; fragments of tableware utensils; and two large milling stones.

Imported Pottery

Three hundred and nineteen fragments of imported ceramics and one whole stoneware bottle were recovered at Ayers Town. Aside from a whiteware plate fragment found while removing overburden along SC highway 5, all of these specimens are likely associated with the Federal period Catawba settlement at the site. And with few exceptions (i.e., two German stoneware and three Chinese porcelain sherds), all are of English manufacture. Several ware groups are represented, including some that were obsolete by the time Ayers Town was occupied. When compared to the large collection of Catawba-made coarse earthenwares found at the site, it is clear that imported ceramics comprised a minor supplement to the overall assemblage of vessels used by the site's occupants. This pattern is similar to that seen at the partly contemporary settlement of Old Town, and imported ceramics at both sites comprise less than 2% of the overall ceramic assemblage. Once imported ceramics became more readily available, they were quickly

Table 6.14. Distribution of Potsherds Attributed to Specific Vessel Types.

Community Area / Context	Jar	Pan	Bowl	Cup	Plate	Other	Total
Residential Complex A							
Feature 3	-	6	15	16	1	1[1]	39
Feature 4	-	19	1	-	-	-	20
Feature 89	2	22	1	-	-	-	25
Feature 91	3	5	3	-	-	-	11
Feature 92	-	1	-	-	-	-	1
Feature 124	7	12	6	-	-	-	25
Sub-total	12	65	26	16	1	1	121
Percent	9.9	53.7	21.5	13.2	0.8	0.8	100.0
Residential Complex B							
Feature 19	-	-	2	-	-	-	2
Feature 55	1	2	7	1	-	1[2]	12
Feature 72	-	7	2	-	-	-	9
Feature 73	8	2	8	-	-	-	18
Feature 74	-	2	1	-	-	-	3
Feature 75	-	-	7	-	-	-	7
Feature 82	-	-	1	-	-	-	1
Sub-total	9	13	28	1	0	1	52
Percent	17.3	25.0	53.8	1.9	0.0	1.9	100.0
Residential Complex C							
Feature 106	1	-	-	-	-	-	1
Feature 107	2	4	28	-	-	-	34
Feature 108	1	2	4	1	-	-	8
Sub-total	4	6	32	1	0	0	43
Percent	9.3	14.0	74.4	2.3	0.0	0.0	100.0
Residential Complex D							
Feature 5	-	2	16	-	1	1[3]	20
Feature 33	-	1	1	-	-	-	2
Feature 69	-	1	25	-	8	-	34
Feature 116	-	4	4	-	-	-	8
Feature 122	-	-	2	-	-	-	2
Feature 123	4	15	19	1	-	-	39
Feature 142	-	4	2	-	-	-	6
Sub-total	4	27	69	1	9	1	111
Percent	3.6	24.3	62.2	0.9	8.1	0.9	100.0
Residential Complex E							
Feature 110	-	-	1	-	-	-	1
Feature 141	4		1	-	-	-	5
Feature 148	-	2	-	-	-	-	2
Feature 154	1	-	-	-	-	-	1
Feature 155	37	14	95	-	-	-	146
Feature 158	-	-	3	-	-	-	3
Feature 162	2	1	8	6	-	-	17
Feature 163	4	13	32	1	-	7[4]	57
Feature 170	3	9	6	2	4	-	24
Feature 185	16	2	4	1	1	1[3]	25
Feature 189	-	1	-	-	-	-	1
Sub-total	67	42	150	10	5	8	282
Percent	23.8	14.9	53.2	3.5	1.8	2.8	100.0

Table 6.14 Continued.

Community Area / Context	Jar	Pan	Bowl	Cup	Plate	Other	Total
Feature 140/190/191 Complex							
Feature 140	4	69	91	1	-	-	165
Feature 190	-	1	5	-	-	-	6
Feature 191	-	1	2	-	-	-	3
Sub-total	4	71	98	1	0	0	174
Percent	2.3	40.8	56.3	0.6	0.0	0.0	100.0
Structure Locality 9							
Features 112 and 114	0	1	5	0	0	0	6
Percent	0.0	16.7	83.3	0.0	0.0	0.0	100.0
Cemetery Area							
Features 7 and 139	0	3	4	0	0	0	7
Percent	0.0	42.9	57.1	0.0	0.0	0.0	100.0
General Site							
Plow Zone	8	0	34	0	1	0	43
Percent	18.6	0.0	79.1	0.0	2.3	0.0	100.0
Total	108	228	446	30	16	11	839
Percent	12.9	27.2	53.2	3.6	1.9	1.3	100.0

[1]bottle, [2]colander, [3]lid, [4]teapot.

Table 6.15. Distribution of Maximum Number of Vessels Represented by Potsherds Attributed to Specific Vessel Types.

Community Area / Context	Jar	Pan	Bowl	Cup	Plate	Other	Total
Residential Complex A							
Feature 3	-	4	7	8	1	1[1]	21
Feature 4	-	5	1	-	-	-	6
Feature 89	2	13	1	-	-	-	16
Feature 91	3	5	2	-	-	-	10
Feature 92	-	1	-	-	-	-	1
Feature 124	4	1	4	-	-	-	9
Sub-total	9	29	15	8	1	1	63
Percent	14.3	46.0	23.8	12.7	1.6	1.6	100.0
Residential Complex B							
Feature 19	-	-	1	-	-	-	1
Feature 55	1	2	7	1	-	1[2]	12
Feature 72	-	4	2	-	-	-	6
Feature 73	5	1	8	-	-	-	14
Feature 74	-	2	1	-	-	-	3
Feature 75	-	-	3	-	-	-	3
Feature 82	-	-	1	-	-	-	1
Sub-total	6	9	23	1	0	1	40
Percent	15.0	22.5	57.5	2.5	0.0	2.5	100.0

Table 6.15 Continued.

Community Area / Context	Jar	Pan	Bowl	Cup	Plate	Other	Total
Residential Complex C							
Feature 106	1	-	-	-	-	-	1
Feature 107	2	2	16	-	-	-	20
Feature 108	1	2	3	1	-	-	7
Sub-total	4	4	19	1	0	0	28
Percent	14.3	14.3	67.9	3.6	0.0	0.0	100.0
Residential Complex D							
Feature 5	-	2	6	-	1	1[3]	10
Feature 33	-	1	1	-	-	-	2
Feature 69	-	1	5	-	3	-	9
Feature 116	-	3	2	-	-	-	5
Feature 122	-	-	2	-	-	-	2
Feature 123	2	11	8	1	-	-	22
Feature 142	-	2	1	-	-	-	3
Sub-total	2	20	25	1	4	1	53
Percent	3.8	37.7	47.2	1.9	7.5	1.9	100.0
Residential Complex E							
Feature 110	-	-	1	-	-	-	1
Feature 141	3	-	1	-	-	-	4
Feature 148	-	1	-	-	-	-	1
Feature 154	1	-	-	-	-	-	1
Feature 155	7	2	14	-	-	-	23
Feature 158	-	-	3	-	-	-	3
Feature 162	2	1	7	1	-	-	11
Feature 163	3	5	30	1	-	1[4]	40
Feature 170	3	7	4	2	2	-	18
Feature 185	8	2	4	1	1	1[3]	17
Feature 189	-	1	-	-	-	-	1
Sub-total	27	19	64	5	3	2	120
Percent	22.5	15.8	53.3	4.2	2.5	1.7	100.0
Feature 140/190/191 Complex							
Feature 140	2	16	29	1	-	-	48
Feature 190	-	1	5	-	-	-	6
Feature 191	-	1	2	-	-	-	3
Sub-total	2	18	36	1	0	0	57
Percent	3.5	31.6	63.2	1.8	0.0	0.0	100.0
Structure Locality 9							
Features 112 and 114	0	1	3	0	0	0	4
Percent	0.0	25.0	75.0	0.0	0.0	0.0	100.0
Cemetery Area							
Features 7 and 139	-	3	4	-	-	-	7
Percent	-	42.9	57.1	-	-	-	100.0
General Site							
Plow Zone	7	0	34	0	1	0	42
Percent	16.7	0.0	81.0	0.0	2.4	0.0	100.0
Total	57	103	223	17	9	5	414
Percent	13.8	24.9	53.9	4.1	2.2	1.2	100.0

[1]bottle, [2]colander, [3]lid, [4]teapot.

Table 6.16. Summary of Imported Ceramics from Ayers Town.

Ware Group	Context		Total	
	Features	Other	N	Percent
Creamware	68	86	154	48.1
Pearlware	36	44	80	25.0
Coarse Earthenware	16	5	21	6.6
Tortoiseshell Ware	15	0	15	4.7
Salt-Glazed Stoneware	7	3	10	3.1
Tin-Enameled Earthenware	9	1	10	3.1
Green Glazed Cream-Bodied Ware	6	1	7	2.2
Jackfield-Type Ware	6	0	6	1.9
Yellow-Glazed Refined Earthenware	5	0	5	1.6
Slipware	3	1	4	1.3
Porcelain	1	2	3	0.9
Refined Earthenware (Indeterminate)	2	0	2	0.6
Dry-Bodied Red Stoneware	2	0	2	0.6
Whiteware	0	1	1	0.3
Total	176	144	320	100.0

adopted by Catawba households. At New Town, occupied during the two decades after Ayers Town is believed to have been abandoned, imported ceramics, including large amounts of blue hand-painted, polychrome hand-painted, and "annular ware" pearlware, comprise more than 15% of the overall ceramic assemblage—an assemblage that included substantial quantities of Catawba-made earthenwares.

In descending order of frequency, imported ceramics from Ayers Town include creamwares, pearlwares, coarse earthenwares, tortoiseshell ware, salt-glazed stoneware, green-glazed cream-bodied wares, Jackfield-type ware, tin-enameled wares, yellow lead-glazed ware, slipware, porcelain, and two fragments of a dry-bodied red stoneware lid (Table 6.16). The distribution of these ware groups by context is provided in Table 6.17.

The sherds representing minority wares (i.e., other than creamwares or pearlwares), many of which were manufactured one or more decades before Ayers Town was established, appear to be from only one or two vessels, and most of these represent uncommon forms such as small saucers, cups, condiment jars, creamers, teapots, and bottles rather than plates and bowls. As such, they represent a varied assortment of ceramics. Another unusual characteristic of the assemblage is that several circular vessel bases and a circular lid were intentionally chipped along the outer margins (see Figures 6.26h, 6.27c, 6.31b, and 6.32d). While the origin of these ceramic pieces is unclear, it is possible that they were retrieved or scavenged from the Catawba town, situated across the river, that was abandoned a year before Ayers Town was established. While this earlier town site has not been investigated archaeologically, it is known from cartographic and historical accounts to have been occupied throughout the 1770s (Davis 1942:553; Mouzon 1775), and the imported ceramics available to Catawbas at that time would have included most of the minority wares found at Ayers Town.

During analysis, each specimen was coded by size, ware group, type, decoration, condition, crossmends, and type of vessel represented. Primary references used for classification and

Table 6.17. Distribution of Imported Ceramic Ware Groups by Context.

Context	Cream-ware	Pearl-ware	Coarse Earthen-ware	Tortoise-shell Ware	Salt-glazed Stoneware	Tin-enameled Ware	Other[1]	Total
Feature 3	0	0	0	0	2	1	3	6
Feature 4	0	0	0	0	0	0	1	1
Feature 5	2	0	1	0	0	0	1	4
Feature 55	29	5	0	0	0	0	2	36
Feature 67	0	1	1	0	1	0	2	5
Feature 68	1	0	0	0	0	0	0	1
Feature 69	5	0	0	0	0	1	0	6
Feature 72	0	0	0	0	0	1	0	1
Feature 73	0	0	2	0	0	0	0	2
Feature 89	0	0	0	12	0	0	1	13
Feature 91	1	0	0	3	1	0	0	5
Feature 92	2	0	0	0	1	0	0	3
Feature 95	0	1	0	0	0	0	0	1
Feature 102	0	0	1	0	0	0	0	1
Feature 107	0	0	1	0	0	0	0	1
Feature 108	1	0	7	0	0	1	0	9
Feature 123	2	2	1	0	0	2	1	8
Feature 124	2	0	0	0	0	0	1	3
Feature 139	0	2	0	0	0	0	0	2
Feature 140	2	8	0	0	1	1	0	12
Feature 141	0	0	2	0	0	0	1	3
Feature 145	0	0	0	0	0	0	1	1
Feature 155	1	1	0	0	0	0	4	6
Feature 158	1	0	0	0	0	0	0	1
Feature 160	0	1	0	0	0	0	0	1
Feature 162	15	7	0	0	1	1	1	25
Feature 163	4	1	0	0	0	0	0	5
Feature 170	0	0	0	0	0	1	4	5
Feature 185	0	4	0	0	0	0	1	5
Feature 190	0	0	0	0	0	0	1	1
Feature 191	0	3	0	0	0	0	0	3
Plowzone	86	44	5	0	3	1	5	144
Total	154	80	21	15	10	10	30	320

[1]Includes green glazed cream-bodied ware, Jackfield-type ware, yellow-glazed refined earthenware, slipware, porcelain, refined earthenware (indeterminate), dry-bodied red stoneware, and whiteware.

description include Arent et al. (2011), Aultman (2003), MAC Lab (2003), Monticello Dept. of Anth. (2010), Noel Hume (1970), and South (1977).

Creamware. Creamware, or Queens Ware, was the most common English-imported ceramic of late colonial and early Federal-period America, and comprises almost half (n=154, 48.1%) of all imported ceramics recovered at Ayers Town. Its inception is credited to Josiah Wedgwood in 1762, and it continued to be produced until about 1820 (South 1977:212). According to Noel Hume (1970:126), creamware sherds do not occur in American

archaeological contexts until the very late 1760s, and this would seem to be supported by evidence from Old Town, where contexts attributed to the pre-1780 component, designated Old Town I, contained only three creamware sherds among a total of 37 imported ceramics.

Creamware is a refined earthenware with a cream-colored body, or paste, and a clear glaze. This glaze has a yellow or greenish-yellow color when it puddles along the edge of a vessel footring. These characteristics differentiate it from pearlware, which has an overall bluish-white appearance and a glaze that appears blue when puddled. Creamware sherds were recovered from both plowzone (n=86) and feature (n=68) contexts; all but 15 of the sherds from features came from Features 55 (n=29), 69 (n=5), 162 (n=15), and 163 (n=4). Most sherds, even from feature contexts, were small, with all but three being less than 4 cm in diameter.

Eleven fragments are from slipped "annular ware" vessels, probably mugs, bowls, or pitchers (Figure 6.23a–d, f–h). Ten of these are from a vessel (or vessels) that had a solid reddish brown exterior slip and a marbled slip variegated surface composed of medium blue and dark brown swirls. These slipped surfaces were separated by a dark brown and cream, engine-turned band. Four of these came from plowed soil overlying Features 72 and 73, two came from Features 123 and 140, and the remainder came from scattered test units. The other "annular ware" creamware fragment, recovered from Feature 124, is from a vessel with a dendritic mocha pattern and appears to have been burned (Figure 6.23e).

Three underglaze transfer-printed creamware sherds were recovered. Two of these are from the same vessel and have an exterior black print design composed of small diamonds filled with stars (Figure 6.23i). This design element, referred to as Diaper/Star in the DAACS stylistic nomenclature (Arendt et al. 2011), usually is applied as a molded, rather than as a transfer-printed, decoration. These sherds were recovered from Feature 55 and Square 870R190, a test unit located 5 m south of Feature 55. The other sherd, with an exterior black transfer-printed design of indeterminate composition but from a different vessel, also was found in Feature 55.

The other 140 creamware sherds from Ayers Town are undecorated (Figure 6.23j–n). Of these, about 43% (n=60) can be associated with a probable vessel form or forms based on rim and base configuration or other unique formal characteristics. They include: plates (n=39); teabowls, teacups, teapots, or pitchers (n=10); bowls (n=6); teapot lids (n=4); and a tankard (n=1). None of the sherds were large enough to reliably estimate vessel size. Several of the plate rimsherds are from plates with a molded scalloped rim (Figure 6.23j–k).

Pearlware. Pearlware represents a refinement of creamware and was mass produced by English potters from about 1780 until the middle of the nineteenth century (South 1977:212). It has an off-white clay body and a clear lead glaze that gives it a slight bluish tint, especially along footrings and around handle junctures where the glaze has puddled. This bluish tint makes it appear whiter than creamware. Most pearlware vessels were decorated, and the most common vessel types are: blue and green-edged plates; "annular ware" mugs, bowls, and jugs with horizontal bands of colored patterns and engine-turned grooves; and bowls, teabowls, saucers, and plates with blue hand-painted, polychrome hand-painted, and transfer-printed designs (Noel Hume 1970:129–133).

Eighty pearlware sherds were recovered from Ayers Town. Thirty-nine of these are undecorated; the remainder include fragments of blue hand-painted (n=24), polychrome hand-painted (n=10), "annular ware" (n=6), and blue edge-decorated (n=1) vessels. Pearlware sherds

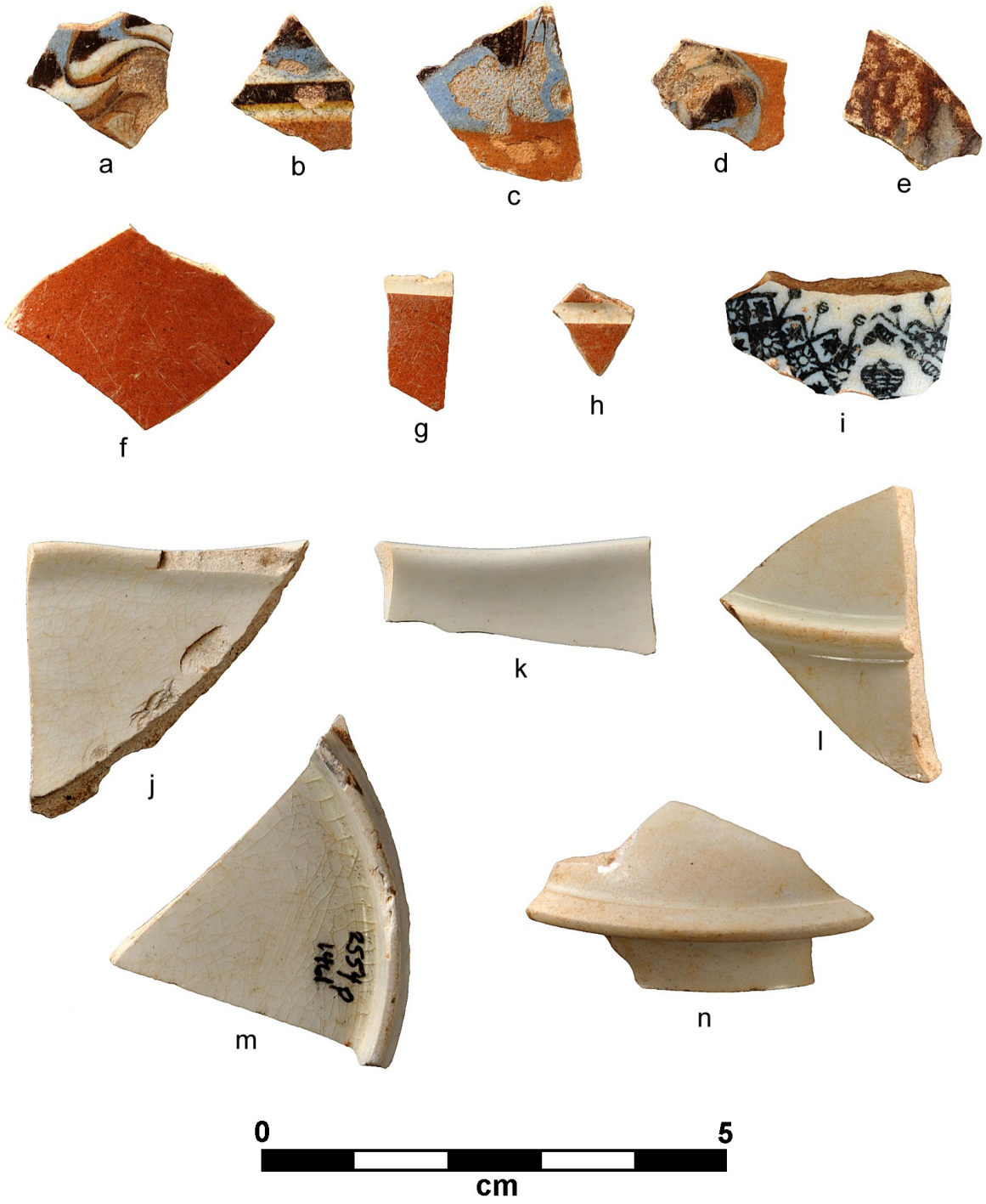

Figure 6.23. Creamware sherds from Ayers Town: "annular ware" sherds with marbled slip variegated surface (a–d), dendritic mocha pattern (e), and reddish brown slip (f–h); black transfer-printed sherd (i); and undecorated plate rimsherds (j–k), basal sherds with footrings (l–m), and sherd from a domed teapot lid (n).

represent the following vessel forms: bowls (n=18); creamers, pitchers, or teapots (n=3); plates or saucers (n=19); teacups or teabowls (n=7); teapot lids (n=2); and indeterminate (n=31). As with the creamware sherds just described, most pearlware sherds were small, with all but five being less than 4 cm in diameter. Almost half (n=37, or 46.3%) of all pearlware sherds were recovered from feature contexts, with most being found in Feature 55 (n=5 sherds representing 3 vessels), Feature 140 (n=8 sherds representing 2 vessels), Feature 162 (n=7 sherds representing 5 vessels), and Feature 185 (n=4 sherds representing 2 vessels). Eight other features yielded a total of 13 pearlware sherds (Table 6.17). The remaining sherds came from plowzone contexts and mostly are very small and heavily eroded.

Design elements present on the 24 pearlware sherds from vessels with blue hand-painted decorations include: a fine-line band below the lip exterior or interior; flowers, leaves, or foliage on the vessel exterior; blue lines on the exterior that likely represent stems; and unidentifiable specks of blue paint (Figure 6.24c–g). Most of these sherds were too small to determine overall designs. Exceptional pieces within this category are: a fluted teacup rimsherd from Feature 55 with a blue-painted lip and blue flowers on the exterior surface (Figure 6.24h); a bowl or teabowl fragment, also from Feature 55, with a blue water and plant (?) design on the exterior (Figure 6.24j); a teapot lid finial from Feature 155 with blue petals around the finial top (Figure 6.24a); and a bowl rimsherd from Feature 162 with a blue line trellis between blue bands on the rim interior (Figure 6.24b). Underglaze blue hand-painted pearlware has a production date range of 1780 to 1820 (South 1977:212).

Design elements present on the 10 polychrome hand-painted pearlware sherds from the site include: three conjoining teacup or teabowl rimsherds from Feature 55 (Figure 6.25d) and another from Square 879R193 with wide and a thin olive bands just below the interior and exterior lip; a sherd with a straight olive line on the exterior; two sherds with designs composed of olive stems, green leaves, and blue flowers (Figure 6.25b–c); a bowl rimsherd from Feature 163 with wide olive bands below the interior and exterior lip, blue swags with orange and green suspended tassels on the exterior, and an indeterminate orange, blue, and green design on the interior (Figure 6.25h); a teapot lid fragment from Feature 162 with a olive brown band around the outer margin and a floral motif composed of a brown stem, a green leaf, and a blue flower (Figure 6.25f); and another teapot lid fragment from backhoe stripping that has a paired blue and orange band around the outer margin (Figure 6.25g). Underglaze polychrome hand-painted pearlware has a slightly more restricted production date range of 1795 to 1815 (South 1977:212), and this type of imported ceramic occurs much more frequently at the early nineteenth-century site of New Town (Davis and Riggs 2004).

The six “annular ware” pearlware sherds from Ayers Town appear to represent three, or possibly four, vessels. Two of these, found in the plow zone, are probable bowl fragments with a wide, brown or dark olive band around the perimeter. Another sherd, a bowl rimsherd from Feature 95, has an engine-turned band of brown dots and squares below exterior lip (Figure 6.25e). Finally, three sherds from Feature 185 are from a single bowl with an exterior decoration composed of vertical stacks of brown dashes at regular intervals (DAACS dash band 11) below an incised, engine-turned, green cordoned band at the vessel lip (Figure 6.25i–k) (Arendt et al. 2011). “Annular ware” pearlwares have a production date range of 1790 to 1820 and also are much more common at New Town (Davis and Riggs 2004; South 1977:212).

Finally, a single, molded, blue edge-decorated plate rimsherd was recovered from Feature 123. The sherd is small and eroded. Given that 18 fragments from plate or saucer bases were

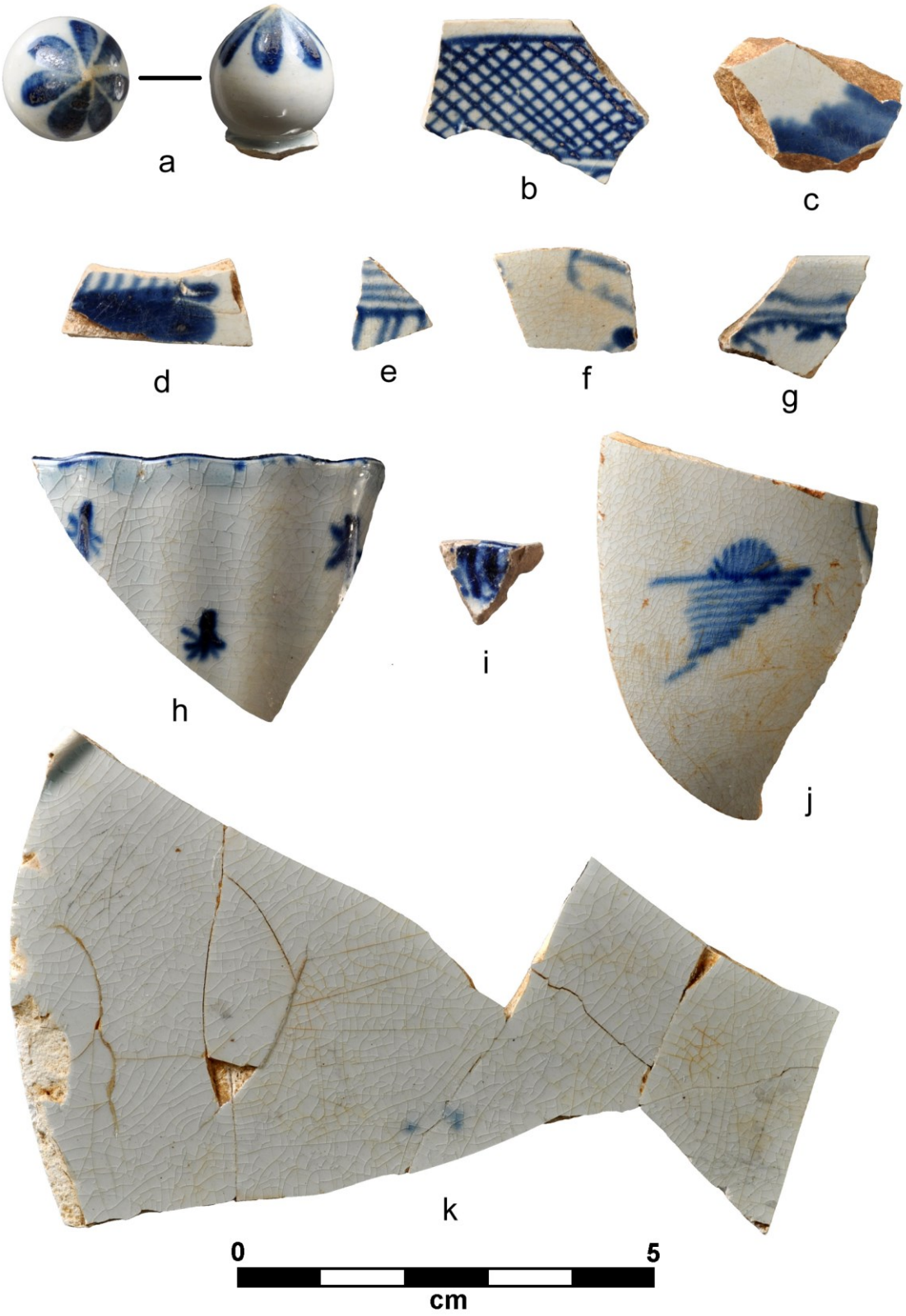

Figure 6.24. Pearlware sherds from Ayers Town: blue hand-painted lid handle (a), rimsherds (b, g–h), and body sherds (c–f, j); blue edge-decorated plate rimsherd (i); and undecorated section of a plate base (k).

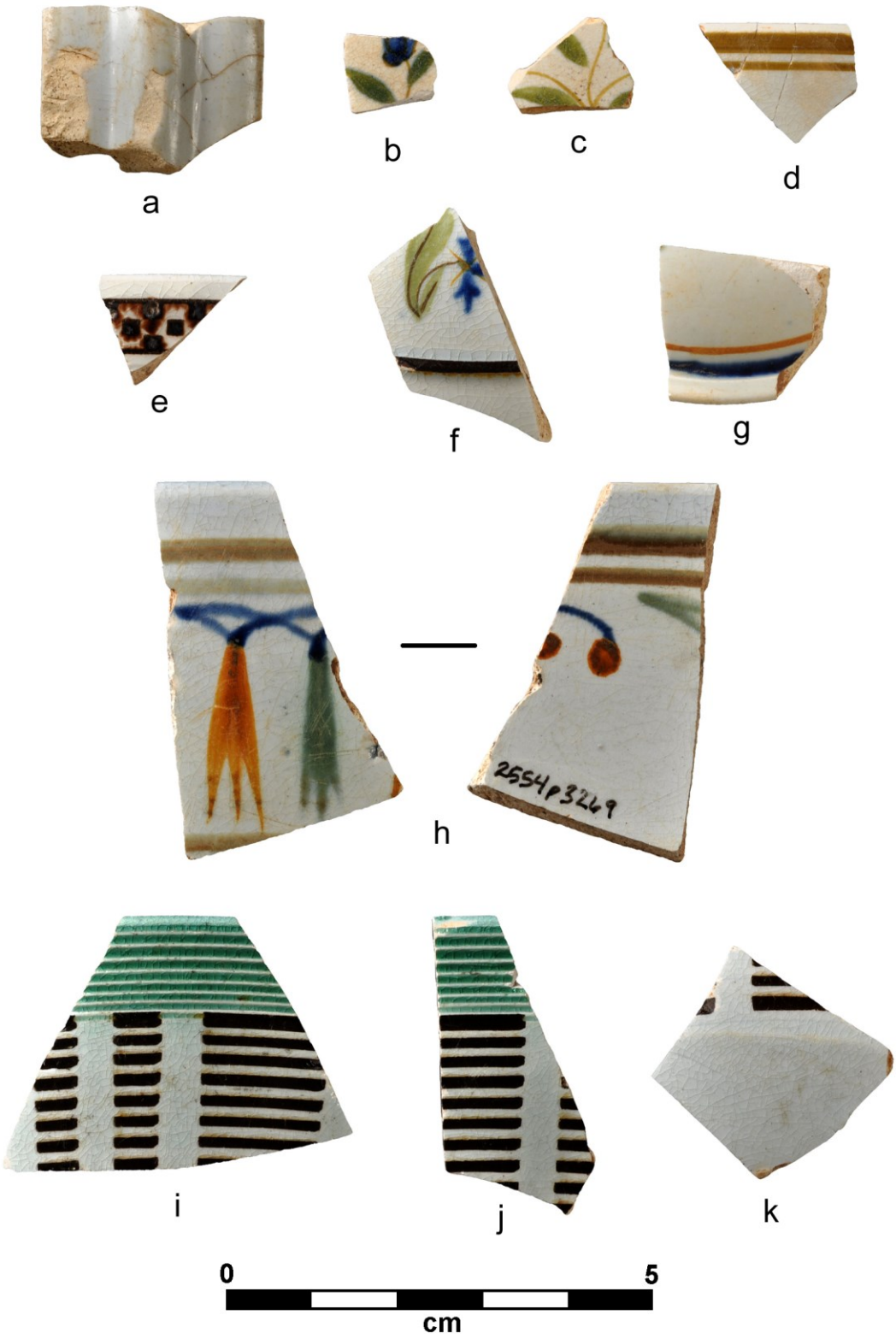

Figure 6.25. Pearlware sherds from Ayers Town: undecorated pitcher handle fragment (a); polychrome hand-painted body sherds (b–c), rimsherds (d, h), and teapot lid fragments (f–g); and "annular ware" rimsherds (e, i–j) and body sherd (k).

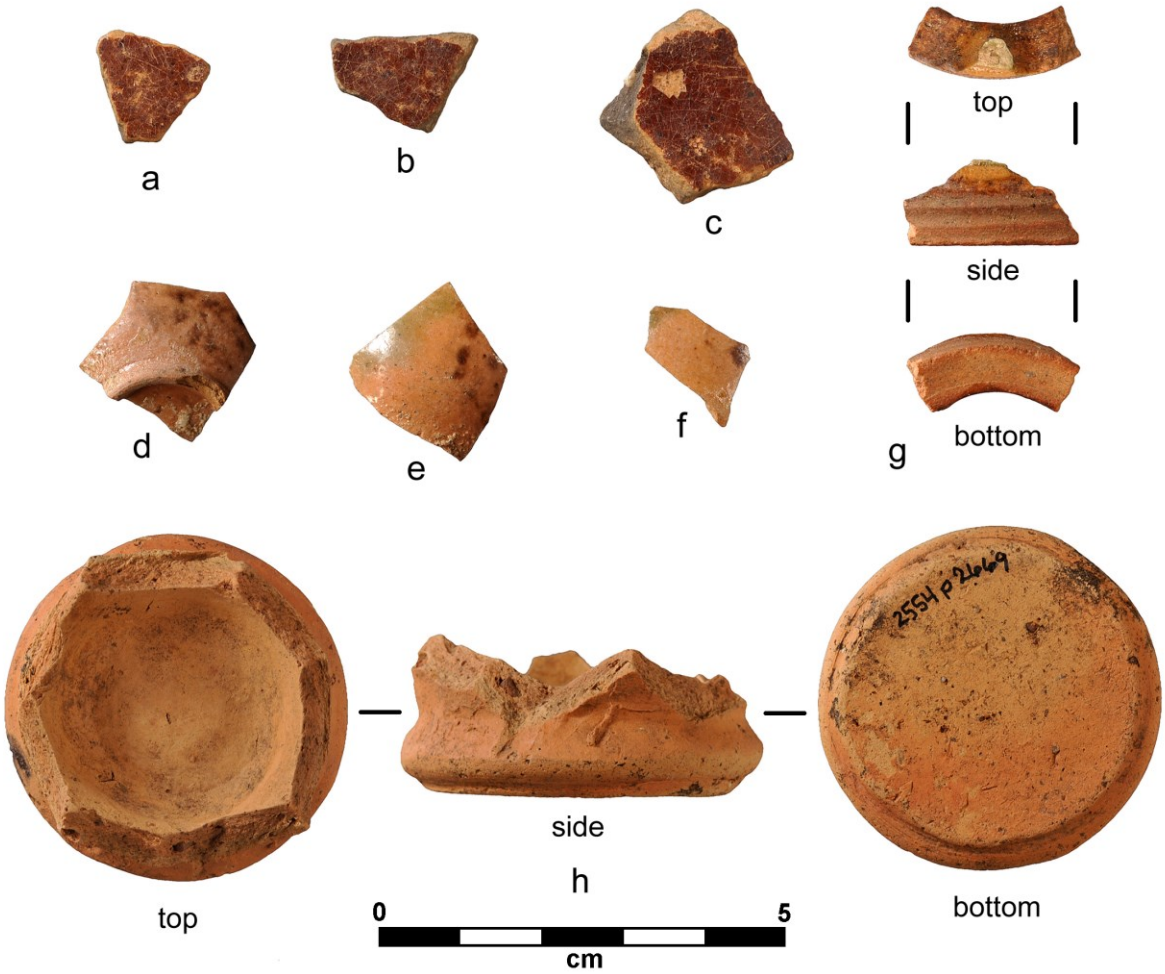

Figure 6.26. Coarse earthenware sherds from Ayers Town.

found, including a large, reconstructed section of a plate base from Feature 140 (Figure 6.24k), it is unusual that only one small plate rim fragment (Figure 6.24i) was recovered. Blue and green edge-decorated pearlware plates have a date range of 1780 to 1830 (South 1977:212).

Coarse Earthenware. Twenty-one coarse earthenware sherds were recovered, representing at least five vessels. Fourteen of these comprise a single type and may represent a single vessel (Figure 6.26a–c). These sherds have a dark gray (5YR 4/1) paste, an opaque, dark red (2.5YR 2.5/4) lead glaze on both exterior and interior surfaces, and most exhibit pronounced ridges on the interior surface. They range from 4.5 mm to 6.3 mm in thickness. Several of the specimens are spall fragments with only a single glazed surface remaining, suggesting that the vessel experienced thermal shock. These sherds are widely distributed across the northwest quarter of the site and were recovered from plow zone in Squares 870R180, 879R193, and 880R190, and Features 5, 73, 102, 107, and 108 (n=7).

Three coarse earthenware sherds from Squares 860R870 and 870R190 and Feature 73 appear to be from a small, thin-walled teacup or saucer (Figure 6.26d–f). These sherds have a reddish yellow (7.5YR 7/8) paste, dark brown specks on the exterior surface, and a clear lead

glaze. The vessel wall thickness ranges from 3.5 mm at the base to 1.6 mm near the vessel shoulder, and it has a 2 cm diameter foot ring.

Two highly unusual sherds from the same vessel were recovered from Feature 141 (Figure 6.26g). They have a reddish yellow (5YR 7/8) paste and are from a foot ring that was 7.1 mm thick and about 50 mm in diameter. The basal surface is flat and the exterior is ribbed. What makes these specimens unusual is the scalloped upper edge. This edge was cut and has a thin, clear lead glaze. A small fragment of white slip adheres to the glaze at the peak of the scallop, suggesting that a white-slipped vessel was attached to the foot ring. While the cut-outs forming the scalloped edge are reminiscent in execution of a puzzle jug, it is believed that these sherds may be from an ornamental table piece such as a salt cellar or condiment jar.

One of the two remaining coarse earthenware sherds is a small fragment from Feature 67. It has a reddish yellow (5YR 6/6) paste and a dull, greenish brown lead glaze on both surfaces. It appears to have been burned. The other specimen, from Feature 123, is an unglazed pedestal base of a small bowl or cup (Figure 6.26h). It is 4.2 cm in diameter and the edge of the vessel body just above the base has been roughly chipped. As with several of the earthenware sherds just described, it too has a reddish yellow (5YR 6/8) paste.

Tortoiseshell Ware. Tortoiseshell ware refers to an early refined earthenware that was produced between about 1740 and 1775 in the factory of Thomas Whieldon and by other English potters. It has a pale yellow or cream-colored paste and a brown, "mottled" lead glaze (Noel Hume 1970:123–125; Monticello Dept. of Anth. 2010:16). Tortoiseshell ware also was produced by South Carolina potter John Bartlam during the 1770s (South 2004:1). Fifteen fragments of this ware type were recovered from Features 89 (n=12) and 91 (n=3), two soil borrow pits at the east edge of the site within Residential Complex A. Ten of the 12 specimens from Feature 89 are from a matching teabowl and saucer (Figure 6.27a–b); the other two sherds are from a second saucer. The three sherds from Feature 91 are from a second teabowl and have a green-and-brown instead of a brown "mottled" glaze.

Salt-Glazed Stoneware. Nine fragments of salt-glazed stoneware and a complete stoneware bottle were recovered. The whole bottle came from Feature 162 and measures 6.5 cm in diameter and about 9.5 cm in height (Figure 6.28). Short, cylindrical bottles are usually classified as ink bottles, though the function of this bottle is uncertain. The brown-glazed exterior, and particularly the vessel lip, are heavily worn. Five of the stoneware fragments are body sherds from larger cylindrical bottles, and glaze color and interior surface striation patterns indicate that two bottles are represented (Figure 6.29a–b). A white salt-glazed bottle that was 10.2 cm in diameter is represented by three sherds from Feature 67, plowed soil overlying Feature 72, and plowed soil stripped from the vicinity of Features 89 to 94. The other bottle, represented by two sherds from Feature 92 and plowed soil stripped in the vicinity of Feature 92, was 9.7 cm in diameter and had a light yellowish brown (10YR 6/4) mottled exterior and a pink (7.5YR 7/4) interior.

Two other sherds — a body sherd with a trace of a handle attachment from Feature 91 and a thick handle fragment from Feature 140 — appear to be from a single jug with a white salt glaze (Figure 6.29c–d). Finally, two conjoining sherds from Feature 3 are from the neck of a Westerwald/Rhenish krug (i.e., a bulbous stein or pitcher with a straight, vertical neck) with a dark reddish brown (2.5YR 3/4), reeded or cordoned neck (Figure 6.29e). Westerwald

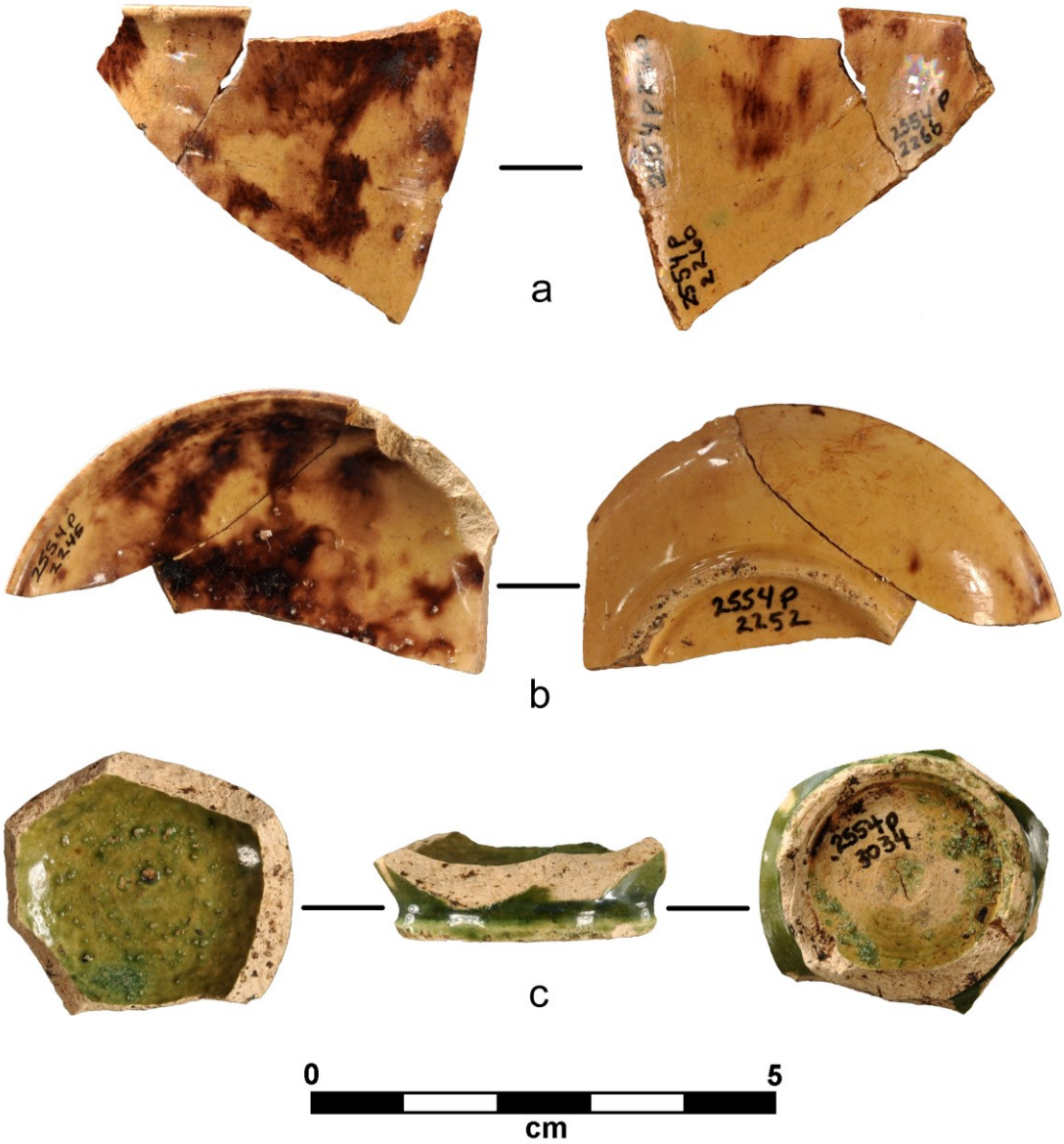

Figure 6.27. Tortoiseshell ware teabowl (a) and saucer (b) fragments and chipped base of a green-glazed cream-bodied ware bowl or cup (c) from Ayers Town.

stoneware of this type was produced from about 1700 until 1775; the other white and brown English salt-glazed stonewares from Ayers Town have date ranges of c. 1720–1805 and c. 1690–1775, respectively (South 1977:210).

Tin-Enameled Earthenware. Tin-enameled earthenware, or delftware, refers to a low-fired, soft-paste ceramic with a thick, opaque white glaze comprised of lead and tin. It was manufactured in England and Holland between about 1600 and 1802. Similar ceramics (i.e., faience and majolica) were produced in France, Spain, and Portugal. Ten fragments of probable English tin-enameled earthenware were recovered at Ayers Town. All are small fragments, with the largest being only 2 cm in diameter, and they most likely represent bowls, cups, or small jars.

Figure 6.28. Brown stoneware bottle from Feature 162 at Ayers Town.

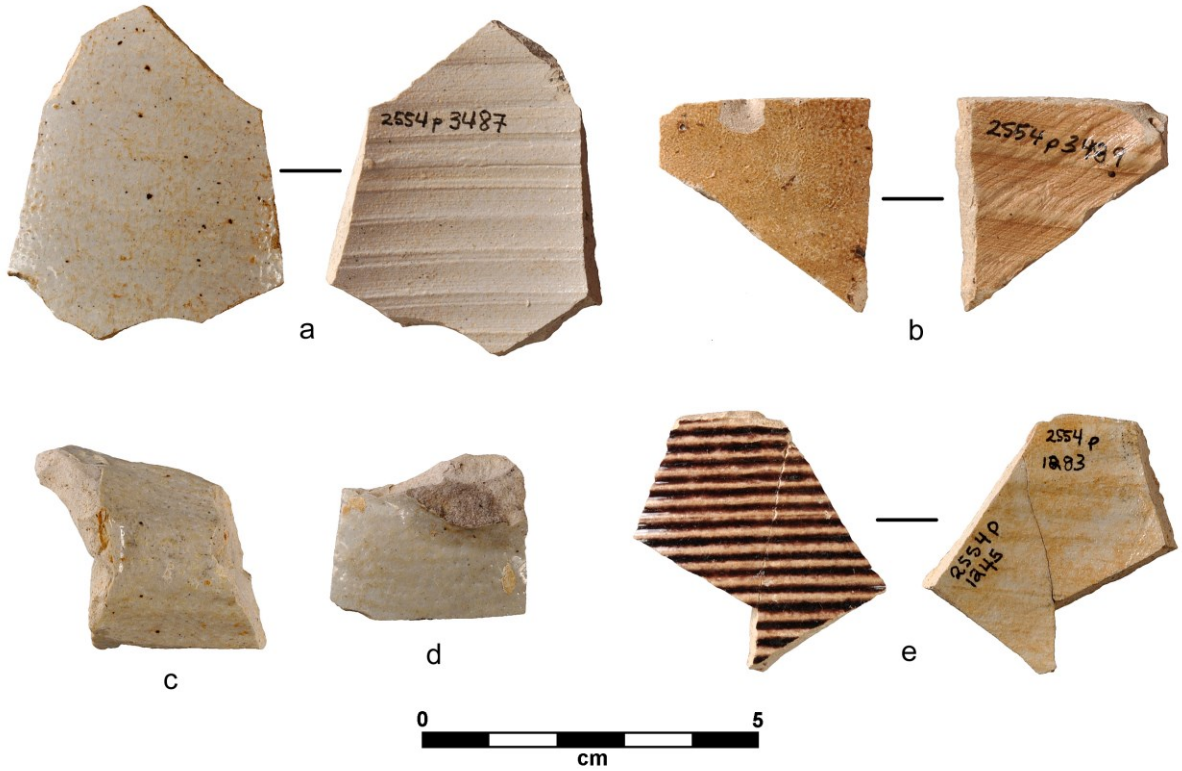

Figure 6.29. Salt-glazed stoneware sherds from Ayers Town: white glazed bottle sherd (a, exterior and interior views); brown glazed bottle sherd (b, exterior and interior views); handle and body sherds from a white glazed jug (c–d); and conjoined neck sherds from a Westerwald krug (e, exterior and interior views).

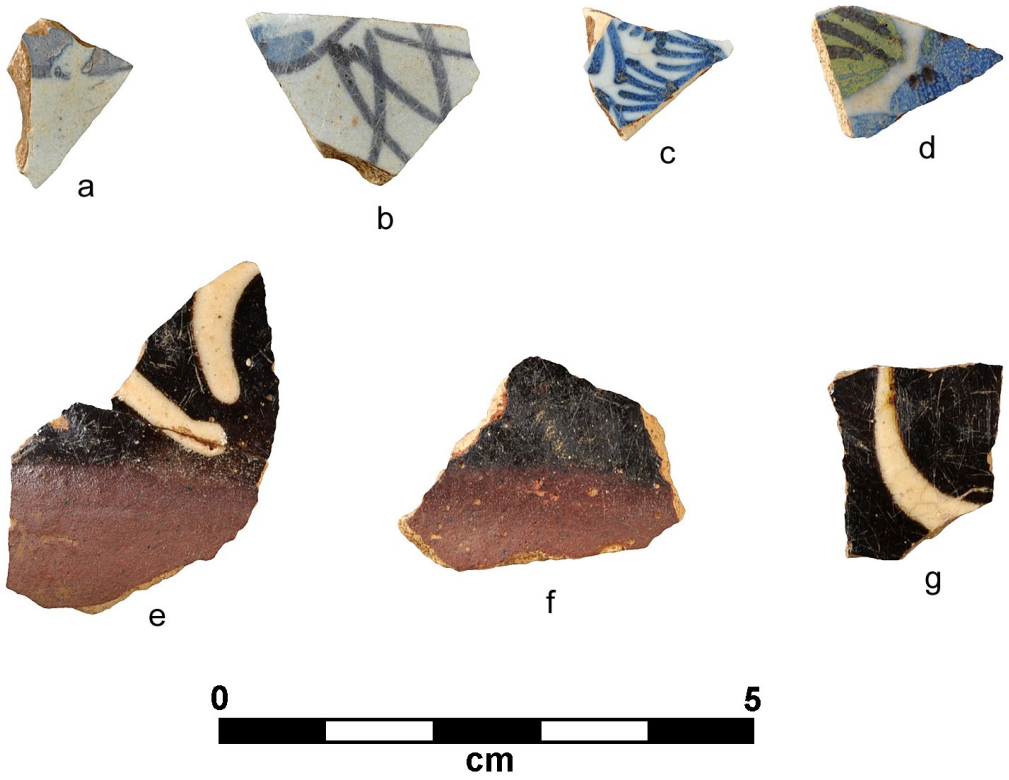

Figure 6.30. Tin-enameled earthenware (a–d) and slip-decorated coarseware (e–g) sherds from Ayers Town.

Six of the sherds are undecorated; the remainder are decorated with blue, hand-painted designs (n=3) and a polychrome floral pattern using a blue, green, and brown palette (Figure 6.30a–d). Tin-enameled sherds were widely distributed across the site and were recovered from Sq. 868R158 (plow zone) and Features 3, 69, 72, 108, 123 (n=2), 140, 162, and 170.

Green-Glazed Cream-Bodied Ware. Seven sherds were recovered that have a cream-colored paste and a green glaze. Although their origin of manufacture is uncertain, they resemble minor variants of green-glazed creamware as well as Carolina creamware, produced in the 1770s by John Bartlam (South 2004). Most of the sherds from Ayers Town are too small to determine vessel form; however, one specimen, from Feature 141, is the base of a small bowl or cup with a 27 mm diameter foot ring (Figure 6.27c). As with the coarse earthenware bowl or cup base found in Feature 123 and described earlier, the edge of this basal sherd also has been roughly chipped. None of the sherds are from molded vessels. Green-glazed cream-bodied ware sherds were recovered from Square 890R170 and Features 3, 55, 67, 89, 141, and 185.

Jackfield-Type Ware. Six fragments of Jackfield-type, or Jackfield, ware were recovered. Five sherds are from a small creamer or teapot that has a lustrous black glaze and a reddish paste (Figure 6.31a). Four of these pieces came from Feature 155; the other was found in Feature 67, a refuse-filled stump hole within the probable road corridor that runs through the middle of the site. Another Jackfield-type sherd with a glassy black glaze and a purplish-gray paste was

Figure 6.31. Jackfield-type creamer or teapot fragment (a, exterior and interior views) and lead-glazed yellow ware teapot lid (b, top and bottom views) from Ayers Town.

recovered from Feature 123. According to Noel Hume (1970:123), Jackfield ware "was produced in quantity from about 1745 to 1790. The body is usually fired to purple or gray and is coated with a deep-black glaze…. The Jackfield Pottery in Stropshire was founded…about 1750, but a very similar ware was made in the same period by Thomas Whieldon and others in Staffordshire, Whieldon's having a red body and a slightly more brilliant black glaze." Both varieties are represented at Ayers Town.

Yellow-Glazed Refined Earthenware. Five fragments of yellow, lead-glazed, refined earthenware were found. Three of these sherds, from Features 3 and 4, are from the footed base of a small saucer, bowl, or teapot. Before being broken, the edges of this vessel base had been roughly chipped. A teapot lid, also with roughly chipped edges, was recovered from Feature 170

(Figure 6.31b). It has a squat handle and a double-beaded band around the outer edge. Finally, a small yellow ware body sherd was recovered from Feature 190. It is uncertain whether these sherds represent Carolina creamware produced by John Bartlam (South 2004) or are the products of other English potters.

Slipware. Slipware refers to a variety of slip-decorated, coarse earthenwares made between about 1670 and 1795. Four fragments of slipware were recovered from Sq. 870R160 (plow zone) and Features 5, 124, and 170 (Figure 6.30e–g). Two of the sherds re-fit, and all appear to be from the same pink-bodied vessel. The vessel exterior had a dark reddish brown slip that was decorated above the shoulder with broad, curved white lines. The exterior surface above the shoulder and the vessel interior possess a yellow lead glaze. Fragments of similar vessels recovered from Oxon Hill (18PR175) in Maryland and dated c. 1710–1750 are illustrated in *Diagnostic Artifacts in Maryland* under Staffordshire-type Slipwares (MAC Lab 2003). The exact age and origin of this vessel are unknown.

Porcelain. Three fragments of underglaze, blue hand-painted Chinese porcelain were recovered from Squares 876R191 and 878R193, and from Feature 162. Because the fragments from the unit excavations are small, it is unclear if more than a single vessel is represented. The sherd from Feature 162 is from a plate with an 8 cm diameter foot ring and has a landscape design on the interior surface comprised of a tree and a boat with two seated persons (Figure 6.32a). Underglaze blue Chinese porcelain has an estimated date range of c. 1660–1800 (South 1977:210).

Refined Earthenware (Indeterminate). Two refined earthenware sherds were recovered that lack an exterior glaze. One of the specimens, from Feature 55, is a small, 8 mm diameter fragment with heavily worn edges. It is interpreted as a gizzard stone, or gastrolith, probably from a chicken. The presence of chickens at Ayers Town is supported by the occurrence of eggshell fragments in the fill of Feature 3. The other specimen came from Feature 170 and is a complete, bisque-fired bowl base with a 9 cm diameter foot ring (Figure 6.32d). It has a pink-colored (7.5YR 8/4) paste and lacks any evidence of a glaze. As with other vessel bases found at Ayers Town, it has been roughly chipped around the margin. No explanation is available as to why a fragment of an unfinished, wheel-thrown vessel would occur at Ayers Town.

Dry-Bodied Red Stoneware. Two non-fitting fragments of a single red stoneware teapot lid were recovered from Features 145 and 170 (Figure 6.32b–c). Dry-bodied red stonewares were produced by Staffordshire potters throughout much of the 1700s; however, these specimens also have a cleanly molded, sprigged rococo decoration on the top surface that resembles "rosso antico," a dry-bodied redware first produced by Josiah Wedgwood in 1763 (Noel Hume 1970:120–121). The Ayers Town sherds likely date to the last quarter of the eighteenth century.

Whiteware. One basal fragment of a whiteware plate was recovered during mechanical stripping of overburden at the south edge of the site. Production of whiteware begins about 1820, and so this specimen post-dates the main occupation of Ayers Town.

Mean Ceramic Dates. The mean ceramic dating method, developed by Stanley South (1977:201–236), is a common method used by archaeologists to estimate the age of archaeological deposits based on the kinds and proportions of dated imported ceramics that they

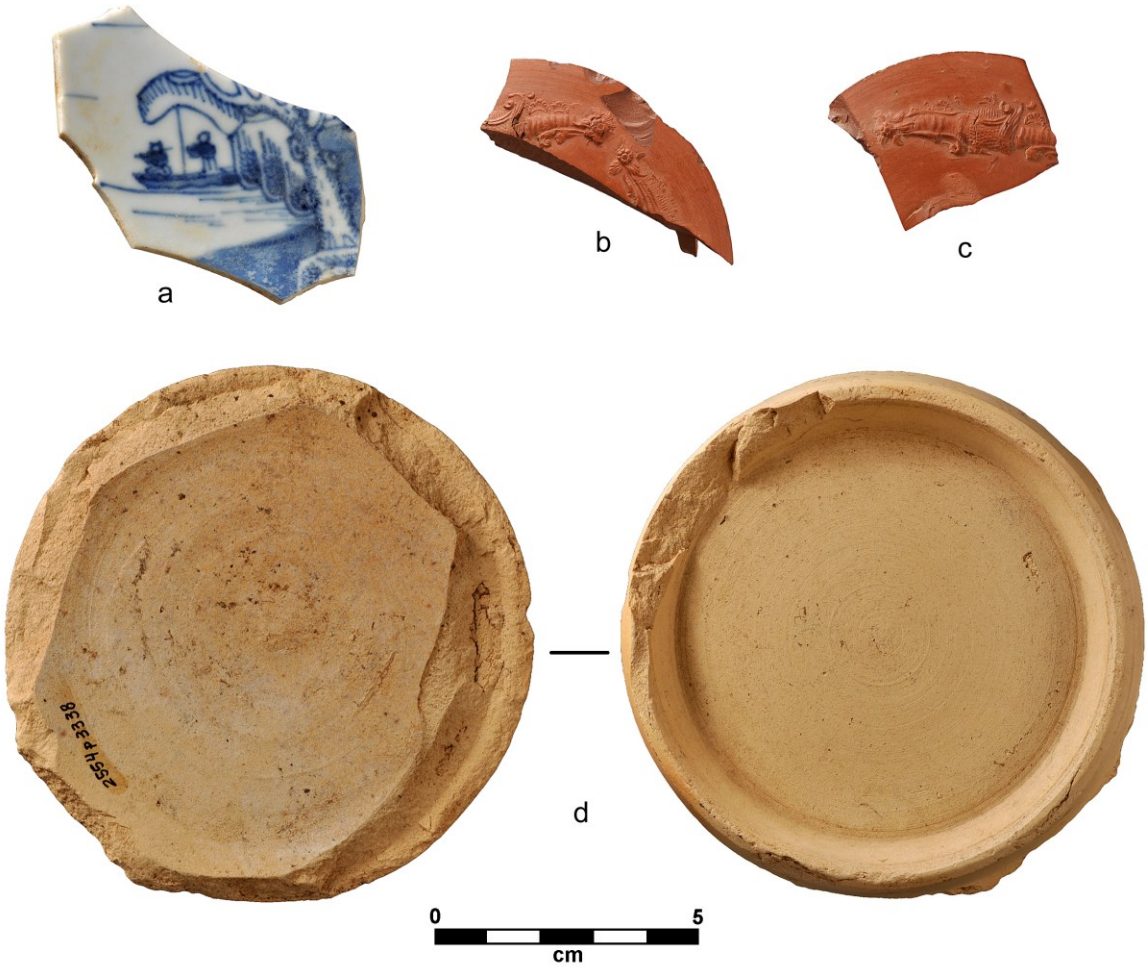

Figure 6.32. Chinese porcelain (a), dry-bodied red stoneware (b–c), and bisque-fired refined earthenware bowl base (d, top and bottom views) from Ayers Town.

contain. Its underlying assumption is that the popularity of ceramic types follows a unimodal curve, with an inception point or beginning date of manufacture, a period of increasing and then decreasing frequency of use, and a terminal date of manufacture. The dating method simply determines the median dates of each ceramic type present in a deposit or assemblage, defined as the mid-points between the inception and terminal dates for the types, and then assigns that median date to each datable sherd. Those median dates are then summed and divided by the total number of datable sherds, which provides a mean or average median date, referred to as the mean ceramic date.

Two mean ceramic dates were calculated for Ayers Town: one based on the entire imported ceramic assemblage (except the single whiteware sherd that post-dates the site occupation) and one based on just the creamware and pearlware types, excluding those sherds that appear to pre-date the period of site occupation. The purpose of this second calculation was to see what date would be obtained from those ceramics which likely were newly acquired while the site was occupied. The data used to calculate the mean ceramic dates are provided in Table 6.18. Estimated date ranges for individual ceramic types were taken from South (1977:Table 31) and

Table 6.18. Data Used to Calculate the Ayers Town Mean Ceramic Dates.

Ceramic Type	N	Begin	Median	Reference
"Annular Ware" Creamware	11	1785–1820	1803	DAACS 2006
Transfer-Printed Creamware	3	1783–1820	1802	DAACS 2006
Undecorated Creamware	140	1762–1820	1791	DAACS 2006, South 1977
"Annular Ware" Pearlware	6	1790–1830	1810	DAACS 2006
Blue Edge-Decorated Pearlware	1	1775–1830	1803	DAACS 2006
Underglaze Blue Hand-Painted Pearlware	24	1775–1820	1798	DAACS 2006
Underglaze Polychrome Hand-Painted Pearlware	10	1795–1830	1813	DAACS 2006
Undecorated Pearlware	39	1775–1830	1803	DAACS 2006
Lead-Glazed Coarse Earthenware	21	–	–	
Tortoiseshell Ware	15	1740–1775	1758	DAACS 2006
White Salt-Glazed Stoneware	7	1720–1805	1763	DAACS 2006
Brown Salt-Glazed Stoneware	1	1690–1775	1733	South 1977
Westerwald/Rhenish Stoneware	2	1700–1775	1738	South 1977
Tin-Enameled Earthenware (18th century)	10	1600–1802	1750	South 1977
Green Glazed Cream-Bodied Ware	7	1759–1775	1767	South 1977
Jackfield-type Ware	6	1740–1790	1765	DAACS 2006
Yellow-Glazed Refined Earthenware	5	–	–	
Yellow-Glazed Slipware	4	1670–1795	1733	DAACS 2006, South 1977
Underglaze Blue Chinese Porcelain	3	1660–1800	1730	South 1977
Indeterminate Refined Earthenware	2	–	–	
Rosso Antico Dry-Bodied Red Stoneware	2	1763–1775	1769	South 1977
Undecorated Whiteware	1	1820–2000	–	
Total	320			

the online Digital Archaeological Archive of Comparative Slavery (DAACS 2006). The mean ceramic date calculated for the overall assemblage, containing 291 datable sherds, is 1787.9; the date for just creamware and pearlware sherds is 1795.9. Both dates fit well within the projected occupation span for the site (c. 1781–1800) based on documentary evidence, with the first date approximating the mid-point in that occupation span and the second date, weighted by the presence of later pearlwares, occurring near the end of the projected occupation span. While the uneven occurrence of imported ceramics within pit features suggests slightly different occupation histories for the various households identified at Ayers Town, the numbers of sherds found within those contexts are too small to support a forceful argument about specifically how those histories might have varied.

Glass Containers and Tableware

Two hundred and two glass container and tableware fragments, as well as one whole bottle, were recovered at Ayers Town. While the majority of these fragments were recovered from features, glass was widely distributed across the site, occurring in 37 excavation units. Vessel forms identified within the assemblage include wine bottles (n=104), case bottles (n=7), small pharmaceutical bottles or vials (n=50), tumblers (n=5), stemware (n=1), a decanter (in 30

Figure 6.33. Glass containers and tableware from Ayers Town: wine bottles (a–b); small bottle/vial fragments (c–d); decanter stoppers (e–f); and reconstructed decanter with neck missing (g).

fragments), stoppers (n=3), and unidentified medium-blue glass (n=3). Although a similar range of container and tableware types is represented at both Old Town and New Town, the density of glass is higher at these sites. Two hundred and thirty-one glass fragments were recovered from nine features at Old Town, and more than 1,100 glass fragments were recovered from six cabin loci at New Town (RLA specimen catalog, accession numbers 2498–2500, 2504).

Wine Bottles. Wine bottles at Ayers Town are represented by a whole bottle from Feature 108 (Figure 6.33a), two large fragments of a bottle from Feature 89 (Figure 6.33b), and 101 smaller fragments from 16 other features. The bottles from Features 108 and 89 share a similar morphology to bottles illustrated by Noel Hume (1970:68) and attributed to between 1783 and 1798. Features containing more than one or two fragments include Features 55 (n=6), 91 (n=5),

92 (n=19), 123 (n=4), and 140 (n=20). While most of these fragments were small (less than 4 cm in diameter), Feature 140 contained a bottle neck and large, conjoining fragments of a bottle base. All of these specimens represent globular, hand-blown wine bottles made of dark, olive green glass, and they range from 2–11 mm in thickness.

Case Bottles. Although not common, case bottles occur at other late nineteenth-century Catawba sites (Davis and Riggs 2004:12). Dark green bottle glass fragments at Ayers Town were inferred to represent case-type bottles if they lacked body curvature, and seven glass fragments were identified as such. All were less than 4 cm in maximum dimension, and all came from plow zone excavations. They range from 1–3 mm in thickness.

Pharmaceutical Bottles. Fifty specimens were identified as probable fragments of small, hand-blown glass pharmaceutical bottles or vials (Figure 6.33c–d). These were readily differentiated from wine and case bottle glass by color and thickness. All were clear (n=34) or light green (n=16) in color, and they ranged from <1–2 mm in thickness. Small bottle/vial glass was very fragile, and most specimens were recovered from feature contexts. Eleven features contained small bottle or vial glass, and those containing significant quantities include Features 33 (n=6), 69 (n=7), 123 (n=5), 140 (n=4), and 170 (n=10). Three of the fragments from Feature 123 were only 0.53 mm thick, and they may be lamp chimney rather than bottle glass.

Glass fragments large enough to determine overall shape represent cylindrical bottles less than about 40 mm in diameter with short (10–14 mm) necks, 10–13 mm diameter openings, and a prominent lip flange. Bottles of this type are called pharmaceutical bottles, or phials, by Noel Hume and are similar in morphology to ones he illustrates and attributes to 1780 (Noel Hume 1970:73). Their use and function among the Catawbas is uncertain.

Tableware Glass. The remaining glass from Ayers Town represents tableware items. Five plain tumbler fragments were recovered from the plow zone (n=2), Feature 69, and Feature 123 (n=2). The specimen from Feature 69 is a thick, basal fragment of a drinking glass that measured about 4 cm in diameter at the base. Several flake-removal scars are evident along the broken edge; however, it is unclear if the tumbler base fragment was deliberately knapped. The remaining pieces include two small rim fragments and two body fragments. In addition to these tumbler fragments, a basal rim fragment of a stemware drinking glass also was recovered from the plow zone.

Decanter. All 30 decanter fragments came from Feature 170 and are from the same vessel. The reconstructed decanter, shown in Figure 6.33g, is largely complete except for the vessel neck and rim. The body has a sub-conical shape, tapering from an 88 mm diameter base to a 65 mm diameter shoulder, and would have held about 10 fluid ounces (300 ml or 0.63 pint). It has a polished pontil and a heavily ground base. This form, known as a bell-shaped or tapered decanter, was developed in the 1770s and in use through the 1790s (Leigh 2002:7).

Stoppers. Glass stoppers were recovered from Features 5, 55, and 163. The specimen from Feature 163, made of ground glass, has a sub-rectangular finial and is largely complete (Figure 6.33f). The specimen from Feature 5 is a ball finial decorated with air bubbles or "tears" (Figure 6.33e). Stoppers of this type were in use during the second and third quarters of the eighteenth century and commonly occur at British American military sites of the 1750s and 1760s (Jones and Smith 1985:28). The third specimen, a fragment from Feature 55, appears to be from a

blown, "ribbed" stopper with a hollow center. Glass stoppers probably were used mostly with decanters and have been recovered from both Old Town (n=1) and New Town (n=6) (RLA specimen catalog, accession numbers 2498–2500, 2504).

Finally, three very small, unidentified chips of medium-blue glass were recovered from Features 102 (n=1) and 108 (n=2).

Cast Iron Vessels

By the end of the American Revolution, more durable and cheaper cast iron cookware such as kettles and Dutch ovens had begun to replace the fragile yet more expensive brass kettles which were common during the late colonial period. This shift occurred quickly, once cast iron became available, and can be illustrated by examining the results of systematic metal detecting and excavation at the 1750s site of Nassaw-Weyapee, the 1760s–1790s occupations at Old Town, and New Town, which was abandoned by about 1820 (RLA specimen catalog, accession numbers 2498–2500, 2504, 2521). Investigations at Nassaw-Weyapee produced 129 brass kettle fragments and two bronze kettle lugs but no cast iron vessel fragments. At Old Town, nine possible brass kettle fragments, 38 fragments of cast iron kettles and Dutch ovens, and two wrought iron pot hooks were recovered. At New Town, no evidence of brass kettles was found, but 95 cast iron fragments representing kettles, Dutch ovens, and pans were found along with six pot hooks and handles.

The timing of this shift to cast iron cookware coincides with the establishment of an iron works on Allison Creek, just north of the Catawba reservation boundary. Details about the iron works, known both as the Hill-Hayne Iron Works and the Aera and Aetna Iron Works, are provided in an advertisement for the sale of the property in 1795 (Anonymous 1795). It operated during the last quarter of the eighteenth century and contained two furnaces, a forge, a hammer mill, and several thousand acres of adjoining land that provided iron ore and wood to make charcoal. The iron works produced bar iron and castings both locally and for the Charleston market, by transporting goods by wagon 70 mi to Camden and then by boat. According to the advertisement, "the greatest part of the iron is made into ovens, pots, flat irons, gudgeons, machinery cranks, and at present there appears to be a great demand for machinery for rice-mills, grist, wind and saw-mills." Wagons transporting iron goods to Camden would have traveled a road that passed within a few miles of Ayers Town, thus providing Catawbas with an opportunity to acquire these goods (Drayton 1802b).

Ayers Town, contemporary with the latter half of the Old Town occupation, produced 39 fragments of cast iron cookware and one wrought iron pot handle (Figure 6.34). All but two of these were recovered during metal detecting and are widely distributed across the site. Of the 10 brass sheet fragments that were recovered, only four are of sufficient thickness (i.e., 0.7–1.0 mm thick) to represent possible recycled kettle fragments; these artifacts are discussed under Metal Resources.

Twenty-three of the cast iron vessel fragments can be attributed to eight separate vessels based on rim form, base form, thickness, or re-fitting. The remaining specimens include unidentifiable body fragments and three handles or podes.

Figure 6.34. Cast iron vessel fragments (a–h) and wrought iron pot handle (i) from Ayers Town.

Dutch Ovens. Four Dutch ovens were identified. Vessel 1 is represented by four fragments widely scattered in linear fashion from the east to the northwest edge of the site. Three of the fragments are flat, basal pieces while the fourth is a large, straight rim fragment with a vertical loop handle. Its curvature indicates that the vessel had a basal diameter of 23 cm, a rim diameter of 25 cm, and a height of 11 cm. All fragments were 6–7 mm thick. Vessel 2 is represented by three conjoining, straight rim fragments that are 5 mm thick and exhibit a thickened, offset band that extends 15 mm below the vessel lip. One fragment has a lug handle positioned 23 mm below the rim that is 23 mm in diameter and extends 75 mm from the vessel wall. Vessel 2 fragments were widely scattered between the northwest and the southeast edges of the site. The remaining two Dutch ovens, Vessels 3 and 4, are represented by single fragments found at the western periphery of the site. Vessel 3 is a 5 mm thick straight rim fragment with a rim treatment similar to that described for Vessel 2, except that the thickened band is 20 mm thick. Vessel 4 is an 8 mm thick, flat base fragment with a curved, rather than a near-right-angle, basal edge.

Two vessels appear similar in form to Dutch ovens, but have thinner walls and may have functioned differently. Vessel 5 is represented by seven rim fragments, all of which were clustered within Structure Localities 7 and 8. All have straight profiles, are 4 mm thick, and exhibit a thickened, offset band that extends 12 mm below the vessel lip. None of these fragments conjoin. Vessel 6 is represented by a single, slightly excurvate rim fragment that is 3 mm thick and has a beveled lip. Its curvature indicates a large vessel with a 30 cm rim diameter.

Kettles. Finally, two kettles with constricted necks and everted rims are represented. Vessel 7, comprised of three rim fragments and one body fragment, is 3 mm thick and has a ridge on the exterior located 13 mm below the lip. All of these fragments were found in the vicinity of Structure Localities 1 and 2. The other kettle, Vessel 8, is represented by a rim fragment and a conjoining body fragment. At the neck on the rim fragment is a right-angled loop handle which is 12 mm in diameter. Overall vessel diameter could not be determined for either kettle.

The single wrought iron pot handle (half of a two-piece handle) is about 29 cm long, 10 mm in maximum diameter, and looped at each end. It was recovered along the proposed wagon road corridor at the northwestern edge of the site.

Tinware

Fifty-seven fragments of tinware were recovered from feature contexts (Figure 6.35). Most of these are small, thin, heavily corroded pieces of tin-plated iron sheet. Aside from one specimen recovered from Feature 5 that may be a lacquered, or japanned, snuff box, none of the pieces can be attributed to a specific vessel type. Several fragments, however, have rolled edges representing vessel rims or folded edges representing both rims and side seams. These specimens likely represent cups, plates, pots, pans, or other containers.

Fragments of tinware were recovered from Features 3 (n=6), 4 (n=8), 5 (n=1), 33 (n=1), 68 (n=3), 69 (n=14), 116 (n=1), 123 (n=5), 140 (n=13), 155 (n=3), and 162 (n=2). All but Feature 68 are interpreted as storage facilities. Several excavated cellar pits associated with both the pre-Revolution (Features 2, 15, and 18) and post-Revolution (Features 11 and 14) occupations at Old Town also yielded tinware fragments.

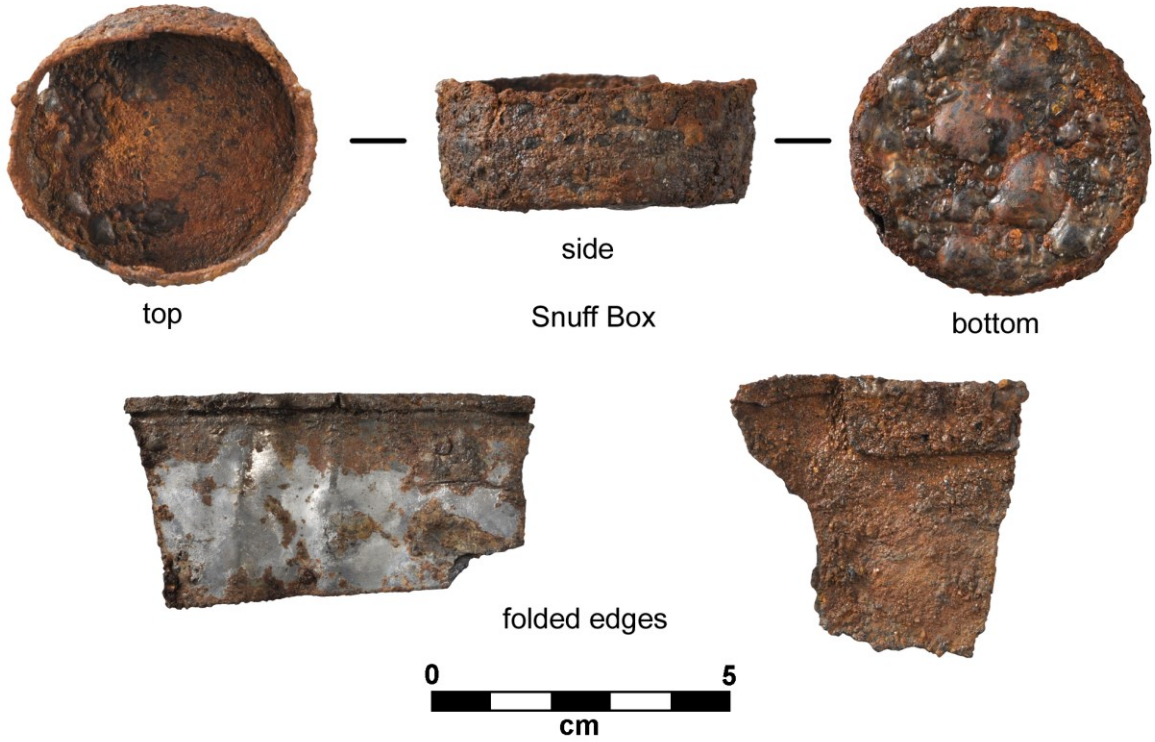

Figure 6.35. Tinware from Ayers Town: top, side, and bottom views of snuff box from Feature 5 (top); and fragments with folded edges from Feature 123 (bottom, left) and Feature 3 (bottom right).

Knives and Spoons

Seven knife and two spoon fragments were recovered (Figure 6.36). Two of the iron knife blade fragments from carving or sheath knives. Two other knife fragments have a round tang and part of the blade; one of these also has a heavy, pewter bolster. All four of these specimens were recovered during metal detecting. The remaining three knives, recovered from Features 123, 140, and 170, are blade fragments of table knives. Two of these have curved, rounded ends. A fragment of a pewter spoon bowl was recovered by metal detecting, and part of a pewter spoon handle (in two pieces) was found in Feature 55.

Personal Activity Group

Artifacts within this activity group include jewelry and other ornaments, smoking pipes and pipe fragments, entertainment items, broken fragments of mirror glass, a coin, a key, pocketknife fragments, fishing gear, and a pair of iron dividers.

Jewelry and Ornaments

By the 1760s, silver had replaced brass as the principal metal used in jewelry worn by the Catawbas. This transition is illustrated by the changing proportion from brass to silver of both

Figure 6.36. Iron knife (a–b, d–e) and pewter spoon (c, f) fragments from Ayers Town.

manufactured and Catawba-made items of personal adornment found at Nassaw-Weyapee (c. 1750s), Old Town (c. 1760s–1790s), and New Town (c. 1790s–1820). At Nassaw-Weyapee, the ratio of silver to brass ornaments is 0.13:1 (n=17); at Old Town it is 1.17:1 (n=26); and at New Town it is 2.5:1 (n=28). While brass tinkling cones, or tinklers, and brass bells are still represented in later Catawba assemblages, new ornaments made of silver, including ball-and-cone earrings and triangular nose bangles, became increasingly popular. The assemblage of jewelry and ornaments at Ayers Town, where the ratio of silver to brass (and tin) ornaments is 2.0:1, reflects this pattern, with the notable exception that no silver nose bangles were recovered. These novel ornaments, made from cut silver sheet and worn suspended from the nose, caught the eye of contemporary observers (Coke 1791) and were relatively common at both Old Town (n=5) and New Town (n=8).

Twelve items of personal adornment were found at Ayers Town and include both manufactured and Catawba-made ornaments made of silver, brass, and tin (Figure 6.37). This does not include 78 large necklace beads discussed earlier with other glass beads under Clothing Group. These items were widely distributed among nine features, including both storage pits (Features 33, 69, 123, 162, and 170) (n=9) and non-storage facilities (Features 72, 74, and 139) (n=3). Silver jewelry include a broach fastener, a broach fragment, a cone and two wire loops from ball-and-cone earrings, a small rolled tubular bead, a cut oval disk with two perforations, and a possible chain link from a nose bangle. Brass ornaments include a crushed bell and a tinkling cone. Finally, two small tin cones also were recovered.

Smoking Pipes

Tobacco smoking is well documented among historic native groups in the American Southeast and was performed in a variety of ritual and secular contexts, including prayer, diplomacy, political deliberation, healing, and recreation (Springer 1981:219). Among Catawba ancestors to the north, such as the Sara, Shakori, and Sissipahaw, the abundance of clay pipes and pipe fragments at archaeological sites associated with these groups indicates that by the

Figure 6.37. Jewelry and ornaments from Ayers Town: silver loops and cone from ball-and-cone earrings (a–b, h); silver chain link for nose bangle (c); rolled silver bead (d); cut oval silver disk (e); silver brooch fragment and clasp (f–g); brass and tin tinkling cones (i–k); and crushed brass bell (l).

seventeenth century tobacco smoking was commonly practiced using both long-stemmed clay elbow pipes and "onion-style" clay pipes (Ward and Davis 1993:203–205, 365–368). While English white-clay, or kaolin, pipes are generally rare on seventeenth-century sites in the Carolina piedmont, by the beginning of the eighteenth century they outnumber locally made pipes (see Davis et al. 2003). Both the abundance of evidence for pipe smoking and the rapid adoption of English-made pipes, once they become readily available, suggest that recreational smoking was widespread by this time. It is tempting, though not clearly demonstrable, to equate

Table 6.19. Frequency Distribution of English and European-made Clay, Catawba-made Clay, and Catawba-made Stone Smoking Pipes at Five Catawba Town Sites.

Site	Kaolin/Other Euroamerican n	%	Local Clay n	%	Stone n	%	Total n	%
Nassaw-Weyapee	1,002	89.8	75	6.7	39	3.5	1,116	100.0
Charraw Town	393	95.2	17	4.1	3	0.7	413	100.0
Old Town	19	13.4	117	82.4	6	4.2	142	100.0
Ayers Town	40	16.0	209	83.6	1	0.4	250	100.0
New Town	0	0.0	592	99.7	2	0.3	594	100.0

the persistence in low frequency of native-made, traditional pipes with their continued use as devices appropriate for performing non-secular functions.

Smoking pipes are well represented on Catawba sites of the mid-eighteenth to early nineteenth centuries. At the mid-eighteenth-century sites of Nassaw-Weyapee and Charraw Town, most pipes are imported English kaolin pipes; locally made elbow pipes of both clay and carved stone, likely made mostly by Catawba artisans, make up 10% or less of those assemblages and reflect more traditional styles and, perhaps, uses (Table 6.19). These traditional pipes have long, squared (and occasionally faceted or round) stems and bowls that are either bulbous or tulip-shaped (i.e., recurvate in profile) and placed at a right angle or slightly obtuse angle to the stem (Fitts et al. 2007:22). Clay pipe exteriors exhibit a natural fired-clay color and are usually buff or reddish brown. These pipes are more appropriately termed pipe heads, as they would have been attached to a longer, hollow stem. During the latter half of the 1700s, as reflected by assemblages at both Old Town and Ayers Town, locally made clay pipes largely replace imported English pipes, and the traditional form common at earlier sites is gradually replaced by plain, short-stemmed elbow pipes with straight or flaring bowls and stems. Bowls are placed at either a right angle or acute angle to the stem, and these pipes often are smudged black and occasionally burnished to create a polished exterior. Such pipes also would have been used with an attached, hollow stem. This pipe form continues into the early nineteenth-century, as evidenced by the Catawba occupation at New Town, with the addition of sometimes elaborate engraved decoration of the pipe bowl and painting (with red sealing wax) of the bowl and stem lip (see Riggs et al. 2006:Figure 5). These decorative pipes, referred to here as the New Town style, likely mark the Catawbas' expansion into the commercial production of pipes, coincident with their developing pottery trade, and establish a distinctive pipe-making tradition that extends up to the present (Blumer 2004; Fewkes 1944; Harrington 1908). More than 75% of the pipes and pipe fragments at New Town are smudged black, and many of those have been subsequently polished.

Six complete or mostly complete smoking pipes and 247 pipe fragments were recovered at Ayers Town. They comprise three broad categories: probable Catawba-made pipes (n=210), English or Euroamerican-made pipes (n=40), and probable non-Catawba-made pipes (n=3). Only one of the probable Catawba pipe fragments is made of carved soapstone; all the remaining specimens are ceramic. The stone pipe fragment, from Feature 4, is a round stem with an 11 mm wide collar at the lip (Figure 6.38p). Stems with narrow lip collars also are represented among the clay pipe fragments.

Figure 6.38. Smoking pipes from Ayers Town: Type 1 pipes (d–f, h) and pipestems with lip collars (m–n); Type 2 pipes (a–c), pipestems with collars (k–l) and facets (o), and incised bowl lip treatment (s); Type 3 pipes (g, i); Type 4 pipestem (q–r); punctated pipe bowl (j); and stone pipestem (p).

Table 6.20. Exterior Surface Finishes on Catawba-made Clay Pipes at Ayers Town.

Pipe Type	Un-smudged n	Un-smudged %	Un-smudged & Polished n	Un-smudged & Polished %	Smudged n	Smudged %	Smudged & Polished n	Smudged & Polished %	Total N	Total %
Type 1	34	56.7	4	6.7	19	31.7	3	5.0	60	100.0
Type 2	19	30.6	5	8.1	9	14.5	30	46.8	62	100.0
Type 3	4	100.0	0	0.0	0	0.0	0	0.0	4	100.0
Type 4	0	0.0	0	0.0	1	11.1	8	88.9	9	100.0
Unidentified	25	33.8	6	8.1	26	35.1	17	23.0	74	100.0

The other 209 probable Catawba-made pipes and fragments can be placed into one of five categories: Type 1– short-stemmed elbow pipes with straight stems and straight bowl profiles; Type 2 – short-stemmed elbow pipes with flaring stems and flaring or recurvate (i.e., tulip-shaped) bowl profiles; Type 3 – short-stemmed, crudely modeled elbow pipes with straight or tapered stems and straight rim profiles; Type 4 – New Town style elbow pipes with engraved or painted decoration; and Unidentified – bowl and stem fragments that cannot be classified as to overall pipe morphology. Unlike later Catawba clay pipes, none of the specimens from Ayers Town show clear evidence of having been made in a mold.

Type 1 Pipes. Sixty Type 1 pipe fragments were identified, comprising 44.0% of classified fragments (i.e., Types 1–4) and representing a maximum of 40 pipes (Figure 6.39d–f, h, m–n). These were widely distributed among 13 features and four test units, with conjoining fragments recovered from Features 55, 140, 163, 190, and 191. Twenty-two fragments have smudged exteriors, and three of those have also been polished (Table 6.20). The remaining specimens, including four with polished exteriors, exhibit a reddish yellow to strong brown color. Most have flattened bowl lips and stems. Three of the un-smudged pipestems are relatively thick compared to other specimens, and one of them has a heel at the base of the bowl. Among the pipestem fragments with smudged or smudged-and-polished exteriors, four (representing two different pipes) have a 3 mm wide collar at the stem lip and one is a faceted stem with 6–8 facets.

Type 2 Pipes. Sixty-four fragments, comprising 47.8% of classified specimens, represent a maximum of 43 Type 2 pipes (Figure 6.38a–c, k–l, o, r). These pipes have flaring stems and bowls. As with Type 1 pipe fragments, these fragments were widely distributed among excavated features, being recovered from 13 features, and often co-occurred within the same fill deposits (i.e., Features 55, 69, 107, 123, and 139). Unlike Type 1 pipes, Type 2 pipes are predominantly smudged and about half of all specimens represent pipes with polished exteriors. Many of the polished pipes are delicate in appearance and have very thin bowl walls that are only 2–3 mm thick. Three pipestems are faceted. One is 10-sided in cross-section (Figure 6.38k), another has 6–8 facets (Figure 6.38l), and the third has seven facets and a 3 mm wide collar at the stem lip. Another plain pipestem also has a lip collar of the same width (Figure 6.38o), and two small rim fragments from Features 69 and 123, representing the same pipe, have a 7 mm wide collar with vertical incisions around the lip of the flaring bowl (Figure 6.38s). Lastly, two fragments of bowl bases had heels (Figure 6.38a, c).

Type 3 Pipes. Type 3 includes four crudely made, hand-modeled elbow pipes recovered from Features 3, 123, and 162. All have rough exteriors, and none are smudged (Figure 6.38g, i). Given that most pipes at Ayers Town are well-made and exhibit generally consistent formal attributes, it is tempting to view these specimens as products of novice pipemakers or child's toys. A diminutive Type 1 pipe found in Feature 69 also may be a toy pipe (Figure 6.38h). The use of pipes by children at Ayers Town was noted by Henrietta Liston (1797), who observed upon entering the town: "The first objects that struck us were two Boys sitting at the door of a Log House, the oldest a Boy about ten had a bow & arrow in his hand, & the younger, about four, a Pipe in his mouth, was smoking with all the gravity of a Philosopher." Several small toy pipes, including one in the shape of a small tomahawk, were found during excavations at New Town (Riggs et al. 2006:Figure 5).

Type 4 Pipes. While most pipes and pipe fragments from Ayers Town were undecorated, nine specimens exhibit engraved and painted decorations commonly found at New Town. These comprise Type 4 and may date to the late end of the site's occupation. All are smudged, and most are also polished. Four specimens, representing a single pipe bowl that was decorated with an engraved band of two parallel lines containing short, opposing, diagonal lines, were found in Feature 55 (Figure 6.38r). Another pipe bowl fragment with parallel engraved lines was recovered from the plow zone, and Feature 139 produced a heavily weathered pipestem fragment decorated with alternating incised and painted bands (Figure 6.38q). Three other pipe fragments from Features 5 (n=2) and 69 (n=1) also were painted with red sealing wax.

English Kaolin Pipes. Thirty-six fragments of English kaolin, or white-clay, pipes were recovered from plow zone (n=10) and 11 features (n=26). Six of the specimens from features came from Feature 55. The 11 pipestems in the sample have bore diameters that measure 4/64 (n=9) and 5/64 (n=2) inches. Though the sample size is far too small to produce a reliable age estimate, the date derived using the Binford (1962) formula (Y = 1931.85 - 38.26X) is 1771.85. This estimate significantly predates the site's age based on documentary and other archaeological data.

Other Euroamerican Pipes. Four other clay pipe fragments appear to be of English or Euroamerican origin; all are made of pale white clay. Two of these, found in the plow zone, are small, conjoining fragments of a plain pipe bowl with a dull green exterior glaze. The other two fragments, from Features 123 and 162, are small fragments of pipes with a fluted bowl, and the specimen from Feature 123 also has a green exterior glaze.

Other Pipes. Finally, three clay pipe fragments were recovered that, because of stylistic or paste characteristics, vary significantly from the rest of the clay pipe assemblage and may not be locally (i.e., Catawba) made. The first specimen was recovered from the base of the test unit into Feature 102, the erosional gully at the northwest edge of the site. It is made of a coarse, sand-tempered paste similar to some of the earlier Woodland potsherds found at the site. The other two specimens, both bowl rim fragments, are from Features 107 and 162, and likely can be attributed to the occupation of Ayers Town. The Feature 107 fragment, shown in Figure 6.38j, has a fine, very pale brown paste and multiple, irregular lines of small punctations on the bowl exterior. This type of decoration is not seen in any other historic Catawba pipe assemblage. The

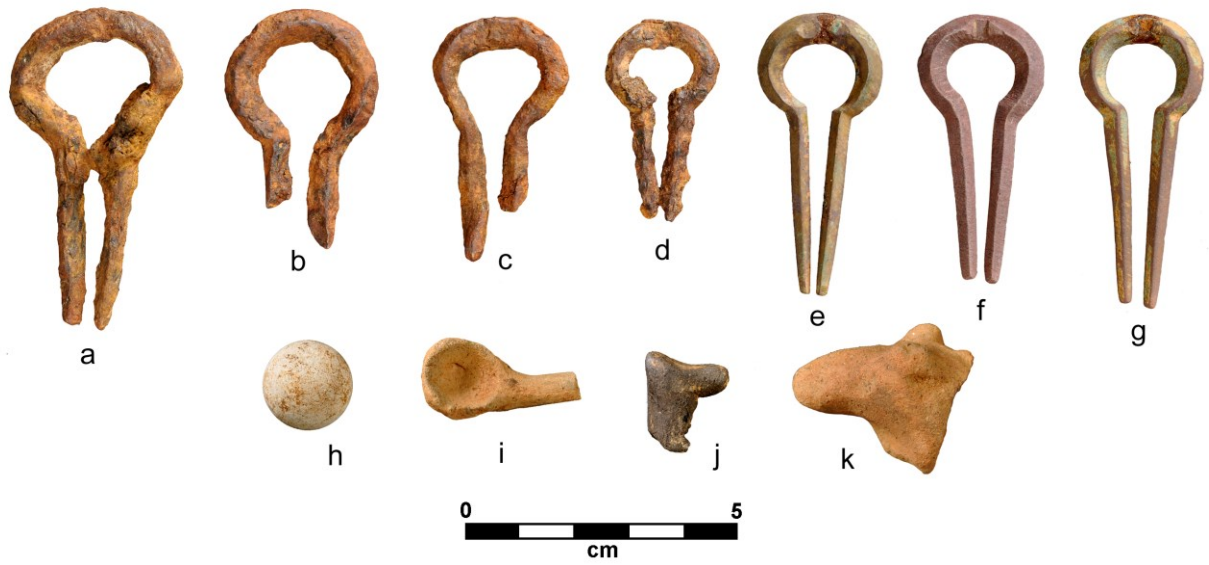

Figure 6.39. Entertainment items from Ayers Town: iron Jew's harp frames (a–d); brass Jew's harp frames (e–g); marble (h); small clay spoon (i); and clay dog head effigies (j–k).

last specimen is a bowl rim fragment with two parallel, irregular incisions around the bowl just below the lip. It too is unique among pipe assemblages from historic Catawba sites.

Entertainment Items

Fifteen artifacts were classed as entertainment items (Figure 6.39). Eleven of these were Jew's harp frames made of iron (n=8) or brass (n=3). All have round frame heads and range from 37–54 mm in length. The Jew's harp, or mouth harp, is a lamellophone comprised of a rigid frame and a flexible reed or tongue. The tongue was made of steel and usually does not survive archaeologically. This particular type of musical instrument apparently was quite popular among Catawbas, as it is one of the more common artifact types found on late eighteenth and early nineteenth century Catawba sites. Seven Jew's harps were recovered during investigations at Old Town, and 21 specimens were found at New Town (RLA specimen catalog, accessions numbers 2498–2500 and 2504). Iron Jew's harps also were recovered at Nassaw-Weyapee (RLA specimen catalog, accession number 2521) and early eighteenth century Occaneechi Town (Carnes 1987:155–156). Jew's harps at Ayers Town were recovered during metal detecting (n=6) and from Features 5, 123, 163, and 185.

Four clay artifacts also are interpreted as entertainment items. These include a ceramic marble (16 mm diameter) and three toys: a miniature clay spoon from Feature 163, a modeled clay dog head effigy from Feature 55, and another dog head effigy found during backhoe stripping.

Mirror Glass

Eight small fragments of flat glass were recovered from plow zone excavations (n=3) and the fill of Features 106 (n=3), 107 (n=1), and 123 (n=1). All five pieces from features were 1.9

mm thick and had a light green color; the three specimens from the plow zone were clear and of varying thickness. Whereas the plow zone artifacts may be modern window glass, those from features likely are mirror fragments, though no traces of metallic backing were observed. Hand mirror fragments were recovered during excavations at Old Town and New Town (RLA specimen catalog, accession numbers 2498–2500, 2504).

Other Items

Eleven other artifacts are included within the Personal Activities Group. A single copper coin — a 1782 George III Hibernia halfpenny — was recovered from Feature 5 (Figure 6.40a). According to Jordan (n.d.), "under George III Irish halfpence were produced in 1766, 1769, 1774–1776 and 1781–1782. Numerous counterfeit halfpence circulated, many bearing the dates 1781 and 1782…. Many of these coins were shipped to America." Thus, it would have been a relatively common coin during the time Ayers Town was occupied.

Three unusual artifacts, all thought to be from a gilted brass pocket watch, or key watch, were recovered from Features 140 and 190 which, together with Feature 191, form three sequential, overlapping pit contexts at the south edge of the site (Figure 6.40h–j). Their co-occurrence in these related contexts suggest that they represent the same item. The artifact from Feature 140 is a fragment of an embossed-decorated brass watch bezel and is small for a pocket watch, measuring only 34 mm in diameter. One of the artifacts from Feature 190 is a broken fragment of a 7.5 mm wide, curved brass band from the outer edge of the watch. Although it was bent slightly when broken, it appears to match the circumference of the bezel. This watch surround fragment is pierced by a cast brass eye screw, a common feature on late eighteenth-century key watches. The other specimen from Feature 190 is a small segment of a probable key chain, comprised of two emboss-decorated, brass chain links connected by a small brass wire loop. Watch fragments and pieces of probable watch chains also have been recovered at New Town.

A fragment of a bell-like object was found in Feature 33 (Figure 6.40e). It is made of cast Britannia metal (a pewter-type alloy also known as tombac), is 1.2 mm thick, has a recurvate profile, and has an orifice diameter of 36 mm. While it may be a piece of a small bell, it seems more likely that this specimen is part of a smoking pipe bowl, as its diameter and profile are very similar to Type 2 clay pipes found at both Ayers Town and Old Town (see above description). Examples of cast pewter smoking pipes were found during excavations at early eighteenth-century Occaneechi Town (Carnes 1987:154–155).

Other personal items from Ayers Town include: a large iron key from Feature 69 (Figure 6.40f); a small brass pen knife scale with an embossed floral design, found during metal detecting (Figure 6.40b); a fragment of a bone pocketknife scale from Feature 123 (Figure 6.40c); a small iron fishhook from Feature 123 (Figure 6.40d); a copper tine, probably from a fish spear, found in Feature 72 (Figure 6.40g); and a pair of iron dividers recovered during metal detecting (Figure 6.40k). Examples of all these artifact classes also were found during metal detector survey and excavations at New Town.

Figure 6.40. Miscellaneous personal items from Ayers Town: 1782 George III (Hibernia) copper halfpenny (obverse and reverse sides) (a); brass pen knife handle (b); bone pocket knife handle fragment (c); iron fishhook (d); fragment of bell-like object (e); iron key (f); copper fish spear tine (g); brass pocket watch bezel (h); brass pocket watch part (i); brass watch chain (j); and iron dividers (k).

Horse Management Activity Group

This group contains artifacts associated with horse tack and horse-drawn transportation devices. By the last quarter of the eighteenth century, Catawbas were heavily reliant upon horses for transportation and other activities requiring draft animals. Artifacts commonly found on Catawba sites of this period, specifically New Town, Old Town, and Ayers Town, include bridle, saddle, harness, and wagon hardware, spurs, horseshoes, and horseshoe nails.

Twenty-one such artifacts were recovered from Ayers Town. Four iron harness buckles and two buckle fragments were recovered from metal detecting (n=4), Feature 33 (n=1), and Feature 69 (n=1) (Figure 6.41a–d). The four complete buckles have single tongues, and the buckle frames range from 34–40 mm in maximum dimension. Three oval brass harness bosses were recovered during metal detecting (Figure 6.41e–g). Two of these measure 38 mm by 24 mm, and one has a stamped floral decoration on its face. The third specimen is smaller, measuring 31 mm by 17 mm, and exhibits traces of a gilt finish. Other bridle or harness hardware include an emboss-decorated brass strap or rein guide with an embossed "diamond" decoration on its face, a folded sheet-iron tip for a heavy leather strap, and an iron snaffle bit with a jointed mouthpiece (Figure 6.41h–j). The bridle bit was found in Feature 69; the other two artifacts came from metal detecting.

Three pieces of saddle hardware were recovered. An iron stirrup fragment was recovered from metal detecting, and two braces for a saddle were found in Feature 5 (Figure 6.41o–p). One of the braces is an L-shaped, wrought iron rod with perforated, flattened ends for attachment to a wooden saddle frame. One arm of the brace measures 67 mm in length; the other arm is 100 mm long. The second brace is poorly preserved in three fragments, but appears similar to the complete specimen. The only wagon part from the site was a wrought iron singletree clip and hook recovered during metal detecting (Figure 6.41k).

A branch of a small horseshoe or pony shoe, three wrought horseshoe nails, and a probable cut horseshoe nail were recovered during the metal detection survey (Figure 6.41l–n). All four nails are about 30 mm long and have large square heads. Finally, a rectangular horse bell made of sheet brass with a black japanned exterior was recovered from Feature 107. It measures 24 mm by 46 mm and is 39 mm tall, with a 23 mm wide, riveted loop for a strap.

Miscellaneous Hardware Activity Group

The 14 artifacts within the Miscellaneous Hardware group include non-architectural fasteners, hinges, and hasps. Most frequent among these were five plain, domed brass tacks with squared shanks (Figure 6.42c). These tacks ranged from 10.2 mm to 11.9 mm in diameter and were recovered from metal detecting (n=1), plow zone (n=1), Feature 33 (n=1), and Feature 170 (n=2). Brass tacks were used in a variety of ways during the late eighteenth century, including as fasteners for furniture upholstery and as decorative elements on bridles, trunks, and other articles of wood and leather. Two small, wrought iron tacks were recovered from Features 55 and 140 (Figure 6.42d). Iron and brass tacks have been found at Nassaw-Weyapee, Charraw Town, Old Town, and New Town. Other non-architectural fasteners found at Ayers Town include two probable wrought iron rivets found during metal detecting and a very small (5 mm in length) brass wire staple from Feature 123 (Figure 6.42e).

Figure 6.41. Horse-related artifacts from Ayers Town: harness buckles (a–d); harness bosses (e–g); rein guide (h); iron strap tip (i); snaffle bit (j); singletree clip (k); horseshoe nails (l–m); horseshoe branch (n); stirrup fragment (o); and saddle brace (p).

Figure 6.42. Miscellaneous hardware from Ayers Town: iron hasps (a, f); iron hinge (b); brass tacks (c); iron tack (d); and iron rivets (e).

Excavation of Zone F in Feature 69 produced an iron T hinge, a large wrought iron strap hasp, and a large wrought iron rivet. All of these artifacts may be hardware from a single, large storage container such as a trunk or chest (Figure 6.42a–b). The vertical side of the hinge measures 120 mm tall by 24 mm wide, while the opposing strap is 45 mm wide and of indeterminate length. It was attached with iron rivets, one of which is still secured to the hinge. The overall dimensions of the hasp are approximately16 cm long by 4.6 cm wide, and it is composed of an iron strap that measures 12 mm wide by 4 mm thick. At one end is a hole approximately 8 mm in diameter; at the other end is a slot that measures 50 mm long by 16 mm wide. It is too corroded to determine method of construction. Hanson and Hsu (1975:62) illustrate a similar hasp from British Fort Stanwix (c. 1758–1781) in central New York. The large rivet measures 24 mm in diameter and 22 mm long, and it may have served to attach the hasp to the trunk.

A second possible wrought iron hasp was recovered during metal detecting (Figure 6.42f). It was fashioned from an iron rod and is much smaller than the Feature 69 specimen.

Metal Resource Group

This group contains artifacts made of brass (or copper alloy), silver, pewter, lead, and iron that represent metal stock, byproducts of metal working, or unidentifiable fragments of finished metal goods. Metal working likely was limited to the rudimentary casting of soft metals, such as lead and scrap pewter, for bullets; the cutting and trimming of brass, tin, and silver sheet to create jewelry and ornaments; and the fashioning of iron tools by cold hammering and bending. No evidence of blacksmithing was found, and a later visitor to the Catawba community at New Town observed that "the only trade among them is a stone [?] smith. They have no shoemaker or Blacksmiths" (Jones 1815).

Brass

Fourteen pieces of brass were recovered and include: four sheet fragments (0.7–1.0 mm thick) from metal detecting that may be pieces of recycled kettles; seven very small, thin pieces of sheet brass from Features 5, 55, 69, 108, and 162; and three small fragments of brass wire from Features 106, 170, and 187.

Silver

Seventeen small strips of cut silver sheet and three fragments of silver wire were recovered from waterscreened feature fill. Most of the cut strips are byproducts of trimming silver sheet, presumably to make ornaments, and are curled or twisted. These specimens were recovered from Features 4, 5, 27, 55, 69, 74, 89, 107, 108, 123, and 142.

Pewter

Eight unidentifiable fragments of pewter were recovered from metal detecting (n=1), plow zone excavation (n=1), and Features 5 (n=1), 55 (n=3), and 163 (n=2). The specimens from Features 5 and 55 are melted lumps and likely represent byproducts from recastings; the remainder may be fragments of spoons or other pewter utensils. Small quantities of unidentifiable pewter also were recovered at Old Town and New Town, and the recovery of a molded but untrimmed pewter button at New Town's Locus 2 suggests that Catawbas there were engaged in casting pewter buttons and perhaps other items.

Lead

Fifty-one miscellaneous pieces of lead or lead alloy were recovered in addition to the 42 lead balls and lead shot discussed earlier under the Arms Group. These fall into the following categories: lead bar (n=1), lead sheet (n=20), lead sprue (n=20), and chewed lead lump (n=10) (Figure 6.43). Most of the lead at Ayers Town probably was acquired as bars, to be cast into ammunition or flattened into lead sheet and used to secure gunflints within the jaws of a gun cock. Among the sheet lead specimens, six are flattened pieces with creases that indicate they were once rolled, three are rolled sheets, and 11 are strips cut from the edges of lead sheet. Polhemus (1978:206), discussing the presence of sheet lead at the Federal-period Tellico

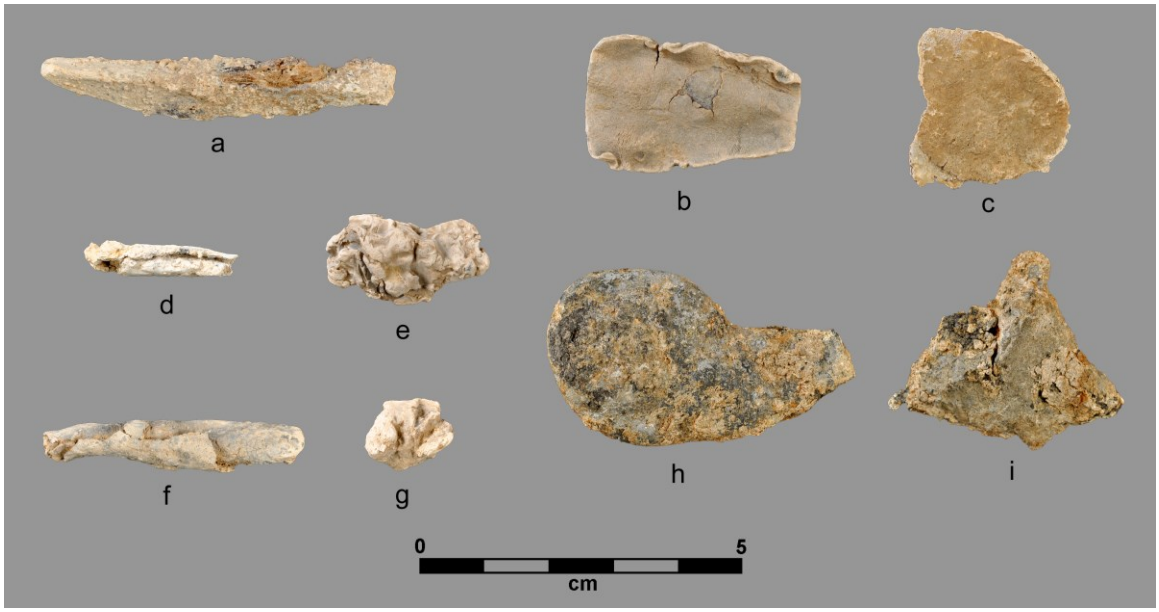

Figure 6.43. Miscellaneous lead from Ayers Town: lead bar (a); flattened lead sheet (b–c); rolled lead sheet (d, f); chewed lead (e, g); and lead-alloy lumps (h–i).

Blockhouse in southeast Tennessee, notes that "Sheet lead [was] produced by hammering a lead ball flat…. The resulting disk of lead was trimmed on two edges producing a strip with which a gun flint could be securely gripped in the jaws of a firearm. One example was still within the jaws of a musket cock or hammer wrapped around the flint."

The one lead bar fragment in the sample, recovered from Feature 5, has a triangular cross-section and is melted at one end. This specimen, along with the lead sprue (the residual lead from casting), indicate that lead casting was performed onsite though no bullet molds were recovered. Most of the 20 sprue fragments are small (i.e., <10 mm in diameter); however, Feature 72 produced five large sprue or melted lead-alloy lumps that range from 23 mm to 47 mm in diameter.

Ten specimens are lumps of chewed lead that exhibit teeth marks. Four lead balls, discussed under Ammunition, also had been chewed, and together these indicate a commonplace, if unhealthy, practice among Catawbas. Several pieces of chewed lead also were recovered from Old Town and New Town.

Lead was recovered from metal detecting (n=9), plow zone excavation (n=2), and Features 3 (n=2), 4 (n=1), 5 (n=2), 33 (n=2), 55 (n=2), 67 (n=1), 69 (n=5), 72 (n=6), 107 (n=1), 108 (n=6), 122 (n=1), 123 (n=7), 162 (n=3), and 190 (n=1).

Iron

The 81 artifacts in this category include 51 specimens classified as iron bar (n=8), iron rod (n=14), iron sheet (n=8), iron strap (n=8), and iron wire (n=14), and also include 29 unidentifiable iron fragments. Thirty-two of these came from metal detecting or plow zone excavation; the remainder (n=48) were widely distributed among 16 different features. Almost

half of the iron in this category from feature contexts came from Feature 55 (n=7) and Feature 123 (n=16). Although many artifacts in this category likely are pieces broken from finished goods, some may represent raw iron stock.

Pottery Production Activity Group

Travelers' accounts in the early nineteenth century indicate that pottery-making was an important activity within Catawba towns (Jones 1815). Beyond the many thousands of potsherds found at Ayers Town, representing ceramic consumption by Catawba villagers as well as production failures, more direct evidence of pottery production also was found in several excavated features. These fall into three categories: (1) the raw materials (i.e., unfired potter's clay and red sealing wax) from which jars, bowls, and plates were created and decorated; (2) the tools (i.e., shell scrapers and burnishing stones) that were used to manufacture those vessels; and (3) incidental waste (i.e., fired clay coil segments and amorphous pieces of hand-modeled and fired potter's clay) resulting from the production of pottery.

Potter's Clay

Sixty-five samples of unfired potter's clay were recovered from fill contexts within 29 separate features. During excavation, these clays were easily recognizable by their color and texture, and were distinctly different from the friable red clay or clay loam that comprises subsoil at the site. The recovered clay samples ranged in color from gray, blue/gray, and tan to red. While most of these features contained only small lumps of clay, the following five features, all sub-floor storage facilities, contained large masses of clay: Feature 3 (1,700 g), Feature 106 (1,380 g), Feature 107 (6,300 g), Feature 155 (770 g), and Feature 170 (750 g). This pattern was not unexpected, as several cellar pits and smaller circular pits at Old Town yielded substantial quantities of gray, blue/gray, and tan clay. Within one cellar pit (Feature 2) at Old Town, pieces of unfired vessel walls were observed among other globular clay lumps. The circular pits at Old Town, all situated adjacent to larger cellars, are thought to be facilities used to store or cure potter's clay.

In a recent elemental study, Rosanna Crow (2011) used x-ray diffraction to characterize and compare potter's clay and potsherds from Ayers Town and Old Town. She concluded that the unfired clays found at both of these sites have elemental properties that are consistent with some of the potsherds from those sites. She also found that, collectively, the clays from Ayers Town and Old Town represent four different sources, and two of these sources were shared by potters from both sites. A comparison with clay samples obtained from Nisbet Bottoms, a clay source located midway between the sites and where modern Catawba potters currently obtain their clay, indicated that this may be the location of one of the shared clay sources.

Red Sealing Wax

The use of red sealing wax for ceramic decoration is a distinctive characteristic of Catawba-made pottery in the post-Revolutionary era (Riggs et al. 2006). At Old Town and New Town, where pottery decorated in this manner has been recovered, both fragments and occasional lumps of red sealing wax also have been found. And, the entry for one pound of sealing wax in Joseph

Figure 6.44. Fragments of red sealing wax from Feature 55 at Ayers Town.

Kershaw's (1784) list of goods to be distributed to the Catawbas almost certainly refers to the material Catawba potters used to decorate their wares (Table 6.1). Therefore, it is not surprising that 15 small fragments of red sealing wax was recovered from the waterscreened fill of four sub-floor storage facilities (i.e., Features 55, 69, 123, and 162) at Ayers Town (Figure 6.44).

Shell Scrapers

Three freshwater mussel shell scrapers and one fragment of a shell scraper were recovered from Features 91, 92, and 123 (Figure 6.45). All have heavily ground edges, which allowed their identification as scrapers. They are interpreted as potter's tools, used for vessel smoothing, thinning, and shaping. Harrington (1908:402–403, Plate XXII) describes the use of mussel shell scrapers by Catawba potter Rachel Brown in 1908 and illustrates two shell scrapers along with other potter's tools made of gourd, bone, and cane. Harrington considered the use of shell scrapers to be of native origin, and, in fact, they have been recovered archaeologically at other sites in piedmont North Carolina that likely were occupied by groups ancestral to the late eighteenth-century Catawba (Ward and Davis 1993:49, 104, 207, 369).

Burnishing Stones

Catawba potters created smoothed, often lustrous surfaces on their pottery by rubbing the vessel surface with a polishing or burnishing stone. Harrington (1908:404) described the process as follows:

> When a batch of vessels was dry, John Brown again took a hand in the work and scraped the surface of each one very carefully with iron and cane knives, reducing all irregularities and making the walls thinner. Much of the symmetry and attractiveness of the finished product depends upon the care with which this work is done. Frequently musselshells are used for scraping. When he had finished a vessel, John handed it to his daughter, who moistened it with a damp rag and rubbed it carefully all over with the

Figure 6.45. Freshwater mussel shell scrapers from Ayers Town, showing outside and inside surfaces with ground scraper edge to the bottom.

> waterworn pebble kept for that purpose, removing all trace of scraping. A fine polished surface may be produced, they told me, by patient use of this primitive tool.

The general scarcity of burnishing stones in the archaeological record suggests that they were highly curated by potters. This practice is consistent with observations made by Vladimir Fewkes (1944:87), who noted in the early 1940s that, among Catawba potters, "…polishing pebbles are regarded as somewhat of a precious possession and are retained in a family often for several generations." He also noted that "smoothing pebbles, with unmistakable facets documenting their original use, are known from sites around the Catawba reservation." Fewkes' comments speak both to the highly curated nature of burnishing stones and to their apparent abundance, likely a direct result of the intensity by which Catawba potters engaged in the craft production and marketing of their wares during the late eighteenth, nineteenth, and twentieth centuries.

Five examples of burnishing stones and probable burnishing stones were found at Ayers Town; all came from feature contexts interpreted as storage facilities (Figure 6.46). The clearest example of a faceted burnisher came from the basal deposits of Feature 140. It is a rounded, fine-grained, quartzite pebble with broad, polished facets. It measures 43 mm by 34 mm by 32 mm. The remaining specimens, from Feature 107 (n=1) and 123 (n=3), are waterworn pebbles or a pebble fragment that have highly polished surfaces or edges unlikely to have been created naturally. Two are made of quartzite, while the others are fine-grained, angular, diorite pebbles with polished surfaces and edges.

Fired Clay Segments and Lumps

Thirty-two pieces of fired clay were recovered that appear to represent the process of pottery manufacture. They occur in two primary forms — rolled cylindrical segments and amorphous lumps that have been manipulated by squeezing or pinching — and are interpreted as pieces of excess potter's clay that became fired, either intentionally or unintentionally. Some pieces may

Figure 6.46. Burnishing stones from Ayers Town. The specimen at left has burnishing facets on the left and top surfaces.

Figure 6.47. Fired clay segments and lumps from Ayers Town.

even be the products of children playing or learning the pottery-making craft. These artifacts were widely distributed among 12 features, including both storage facilities and borrow pits; however, about one-third (n=11) came from a single storage facility, Feature 123 (Figure 6.47).

Artifacts of Indeterminate Function

Worked Stone

Twenty stone objects of indeterminate function were recovered from 11 excavated features. Most of these show clear evidence of modification by chipping, grinding, or polishing, and comprise three classes of objects: polished or smoothed cobbles or pebbles, chipped disks, and large tabular rocks. All are thought to be attributable to the Federal period Catawba occupation of the site. Eleven of these are smoothed or polished alluvial pebbles and were recovered from Features 33, 69, 107, 116, 123, 155, 162, and 170. None appear to have been used as pot burnishers. Large stone disks were recovered from Features 123, 140, and 191 (Figure 6.48). These range from 6–11 cm in diameter and 11–14 mm in thickness, are made of schist, and were formed by rough chipping and grinding. Finally, six large, rectangular, tabular stones were recovered from Features 69, 89, 107, 140, and 155. Most have been shaped by chipping along one or more margins and are made of schist. The specimens from Features 140 and 155 have a concave surface and may have been used as grinding or milling stones; others display surface that presumably were smoothed through use. Large chipped disks and tabular rocks are not unique to Ayers Town. Several were recovered from multiple features at Old Town (i.e., Features 1, 7, 11, 13, 16, and 18; RLA specimen catalog, accession number 2499).

The most unusual of these artifacts was recovered from Zone C in Feature 69. It is a tabular rock that measures 15 cm wide by 18 cm long by 3 cm thick, and on one surface is what appears to be an engraved depiction of the national flag of Scotland with the Saltire, or the Saint Andrew Cross (Figure 6.48). This engraving measures 53 mm wide by 28 mm tall. Catawba warriors who earlier had fought for the British during the Quebec campaign of 1759, alongside highland Scottish regiments, would have been familiar with this flag. Another hint of a Catawba-Scottish connection was found during 2008 investigations at the 1750s site of Nassaw-Weyapee. Feature 48, an abandoned storage pit at Weyapee, yielded the broken blade of a Scottish short sword or dirk, perhaps brought back as a war souvenir in the fall of 1759.

Finally, a large (45 mm diameter) chunk of unworked hematite was recovered from Feature 108, and a small fragment of unworked mica was found in Feature 123.

Clay Artifacts

Two clay artifacts of indeterminate function were recovered. An unfired clay disk, or plug, measuring 20 mm in diameter and 8 mm thick was found in Feature 69. Feature 123 yielded a smudged and polished “sherd” or fragment of an object that appears to be triangular or trapezoidal in shape with flat surfaces and squared edges. It tapers from 8.9 mm to 7.6 mm in thickness, is 21 mm wide, and is painted on all finished surfaces with red sealing wax. It clearly is not a ceramic vessel fragment, but it also does not appear to be part of a smoking pipe.

Brass Artifacts

Four brass artifacts of indeterminate function were found. Two of these, recovered during metal detector survey and from Feature 163, are identical wire rings measuring 1.4 mm in thickness and 14.5 mm in diameter. The other artifacts are pieces of sheet brass in contact with

Figure 6.48. Chipped disks (left) and engraved tabular rock (bottom right) from Ayers Town. A close-up view of the engraving is shown at top, right.

preserved organic (probably cotton or flax) fibers. One of these was found in Feature 55 and consists of short fibers sandwiched between two small brass fragments. The other artifact is a woven, wick-like cord (2 mm diameter and 20 mm long) that apparently was encased in a thin, rolled brass tube and came from the base of Feature 139. Only a thin strip of the brass tube remains. This artifact may be a lace tip or aglet.

Iron Artifacts

Eleven iron artifacts were recovered whose functions are either indeterminate or ambiguous. Artifacts within this category and found during the metal detector survey include: a piece of riveted iron strap; six wrought iron objects; a pointed iron rod that may be a flax wheel spindle; and a hollow, six-sided iron rod that measures 8 mm in diameter and 62 mm long. The two remaining artifacts are an unidentifiable iron lump from Feature 33 and a small iron pellet from Feature 69.

Wood Artifacts

Two wooden objects were observed during feature excavation. Zone 1 fill in the north half of Feature 3 contained part of a wooden plank that varied from 10-30 mm in thickness. Because of its extremely poor state of preservation, only fragments of it were recovered. Feature 4, located adjacent to Feature 3, contained the only other artifact made of wood or another organic substance. It is a small, warped disk that measures 28 mm in diameter, varies from 2.7-5.0 mm in thickness, and appears to have been burned.