

Following shovel shaving and mapping, all subsoil intrusions were cored and cultural features were excavated. Because the unit was inundated by a cloudburst on the final day of fieldwork, a few of the cored postmolds were not excavated. These are labeled possible postmolds but are not given feature numbers on the plan map. A total of 85 feature numbers was assigned within the confines of the block. This includes features found in the test pits and trenches.

Table 25 presents dimensions of each cultural feature found in Block D. Figure 96 illustrates profiles of typical features. Excavation photographs are shown in Figure 97. Artifacts recovered from Block D features consisted primarily of grit tempered pottery and chipped stone debris. Diagnostic pottery found in the features consisted entirely of Bull Creek phase ceramics. Table 26 lists all artifacts recovered from the features.

Table 25. Attributes of Block D Postmolds and Small Pits.

Feature Number	Feature Type	Diameter at definition	Feature Depth	Description Fill of Feature
Feature 13	Postmold	20 cm	15 cm	grey-brown silty loam, charcoal flecks
Feature 14	Postmold	20 cm	14 cm	dark brown sandy loam
Feature 15	Postmold	14 cm	6 cm	dark brown sandy loam
Feature 19	Postmold	18 cm	7 cm	grey sandy loam, charcoal flecks
Feature 20	Small Pit	38 x 42 cm	6 cm	grey-brown sandy loam, charcoal flecks
Feature 21	Postmold	20 cm	7 cm	grey-brown sandy loam, charcoal flecks
Feature 22	Small Pit	32 x 44 cm	6 cm	grey-brown sandy loam, charcoal flecks
Feature 23	Postmold	15 cm	4 cm	grey-brown sandy loam
Feature 25	Postmold	16 cm	17 cm	grey-brown sandy loam
Feature 26	Postmold	15 cm	7 cm	grey-brown sandy loam, charcoal flecks
Feature 27	Postmold	19 cm	16 cm	grey-brown sandy loam, charcoal flecks
Feature 28	Postmold	11 cm	6 cm	medium brown sandy loam
Feature 29	Postmold	18 cm	23 cm	medium brown sandy loam
Feature 30	Postmold	10 cm	4 cm	medium brown sandy loam
Feature 31	Postmold	18 cm	12 cm	medium brown sandy loam
Feature 32	Postmold	20 cm	14 cm	medium brown sandy loam
Feature 33	Postmold	16 cm	11 cm	medium brown sandy loam
Feature 34	Postmold	12 x 24 cm	10 cm	medium brown clay loam
Feature 35	Postmold	18 cm	11 cm	medium brown sandy loam
Feature 36	Postmold	16 cm	8 cm	medium brown sandy loam
Feature 37	Postmold	16 cm	13 cm	medium brown sandy loam
Feature 38	Postmold ?	22 cm	30 cm	medium brown sandy loam
Feature 39	Postmold	25 cm	25 cm	medium brown sandy loam

Table 25. Attributes of Block D Postmolds and Small Pits.

Feature Number	Feature Type	Diameter at definition	Feature Depth	Description Fill of Feature
Feature 40	Postmold	18 cm	10 cm	medium brown clay loam
Feature 41	Postmold	18 cm	17 cm	medium brown sandy loam
Feature 42	Postmold	12 cm	6 cm	medium brown sandy loam
Feature 43	Postmold	23 cm	7 cm	medium brown sandy loam
Feature 44	Postmold	15 cm	15 cm	medium brown sandy loam
Feature 45	Postmold	20 x 25 cm	10 cm	medium brown clay loam
Feature 46	Postmold	20 cm	13 cm	medium brown sandy loam
Feature 47	Postmold	20 cm	18 cm	medium brown sandy loam
Feature 48	Postmold	21 cm	18 cm	medium brown sandy loam
Feature 49	Postmold ?	18 cm	24 cm	medium brown sandy loam
Feature 50	Postmold	16 cm	14 cm	medium brown sandy loam
Feature 51	Postmold ?	20 cm	14 cm	medium brown sandy loam
Feature 52	Postmold	15 cm	9 cm	grey-brown sandy loam
Feature 53	Postmold	18 cm	10 cm	medium brown sandy loam
Feature 54	Postmold	15 cm	11 cm	medium brown sandy loam, charcoal
Feature 55	Postmold ?	16 cm	4 cm	medium brown sandy loam
Feature 56	Postmold	16 cm	15 cm	medium brown sandy loam
Feature 58	Small Pit/PM	28 cm	9 cm	dark brown sandy loam
Feature 69	Small Pit/PM	28 cm	12 cm	medium brown sandy loam
Feature 70	Postmold ?	20 cm	20 cm	medium brown loam, clay flecks
Feature 71	Postmold	18 cm	17 cm	medium brown sandy loam
Feature 72	Small Pit	35 cm	15 cm	medium brown sandy loam, charcoal
Feature 73	Postmold	20 x 25 cm	8 cm	medium brown sandy loam
Feature 74	Postmold ?	24 cm	15 cm	medium brown sandy loam
Feature 75	Postmold ?	24 cm	30 cm	medium brown sandy loam
Feature 76	Postmold	20 cm	26 cm	medium brown sandy loam
Feature 77	Postmold	7 cm	3 cm	medium brown sandy loam
Feature 78	Postmold	16 cm	14 cm	medium brown sandy loam
Feature 79	Postmold	20 cm	12 cm	medium brown sandy loam
Feature 90	Postmold	20 cm	12 cm	medium brown sandy loam
Feature 91	Postmold	19 x 24 cm	11 cm	medium brown sandy loam

Table 25. Attributes of Block D Postmolds and Small Pits.

Feature Number	Feature Type	Diameter at definition	Feature Depth	Description Fill of Feature
Feature 92	Postmold	19 cm	11 cm	medium brown sandy loam
Feature 93	Postmold	17 cm	11 cm	medium brown sandy loam
Feature 95	Postmold	15 cm	5 cm	medium brown sandy loam
Feature 96	Postmold	28 cm	35 cm	medium brown sandy loam
Feature 97	Postmold	20 cm	16 cm	medium brown sandy loam
Feature 98	Postmold ?	20 cm	30 cm	medium brown sandy loam
Feature 99	Postmold	18 cm	10 cm	medium brown sandy loam
Feature 100	Postmold ?	18 cm	20 cm	medium brown sandy loam
Feature 101	Postmold	18 cm	15 cm	medium brown sandy loam
Feature 102	Postmold	15 cm	10 cm	medium brown sandy loam
Feature 103	Postmold	20 cm	15 cm	medium brown sandy loam
Feature 104	Postmold	20 cm	18 cm	medium brown sandy loam
Feature 105	Postmold	15 cm	5 cm	medium brown sandy loam
Feature 106	Postmold	14 cm	7 cm	medium brown sandy loam
Feature 107	Postmold	15 cm	7 cm	medium brown sandy loam
Feature 108	Postmold	19 cm	20 cm	dark brown sandy loam
Feature 109	Postmold	17 cm	3 cm	medium brown sandy loam
Feature 110	Postmold	14 cm	5 cm	medium brown sandy loam
Feature 111	Postmold	14 cm	8 cm	medium brown sandy loam
Feature 112	Postmold	20 cm	5 cm	medium brown sandy loam
Feature 113	Postmold ?	17 cm	6 cm	medium brown sandy loam
Feature 114	Postmold	20 cm	9 cm	medium brown sandy loam
Feature 115	Postmold	14 cm	3 cm	medium brown sandy loam
Feature 116	Postmold	14 cm	13 cm	medium brown sandy loam
Feature 117	Postmold	22 x 26 cm	10 cm	medium brown sandy loam
Feature 118	Postmold	18 cm	8 cm	medium brown sandy loam
Feature 119	Postmold	17 x 22 cm	10 cm	medium brown sandy loam
Feature 120	Postmold	20 cm	8 cm	medium brown sandy loam
Feature 121	Postmold	20 cm	7 cm	medium brown sandy loam
Feature 122	Postmold	15 cm	8 cm	medium brown sandy loam

Postmold ? indicates a possible or questionable postmold.

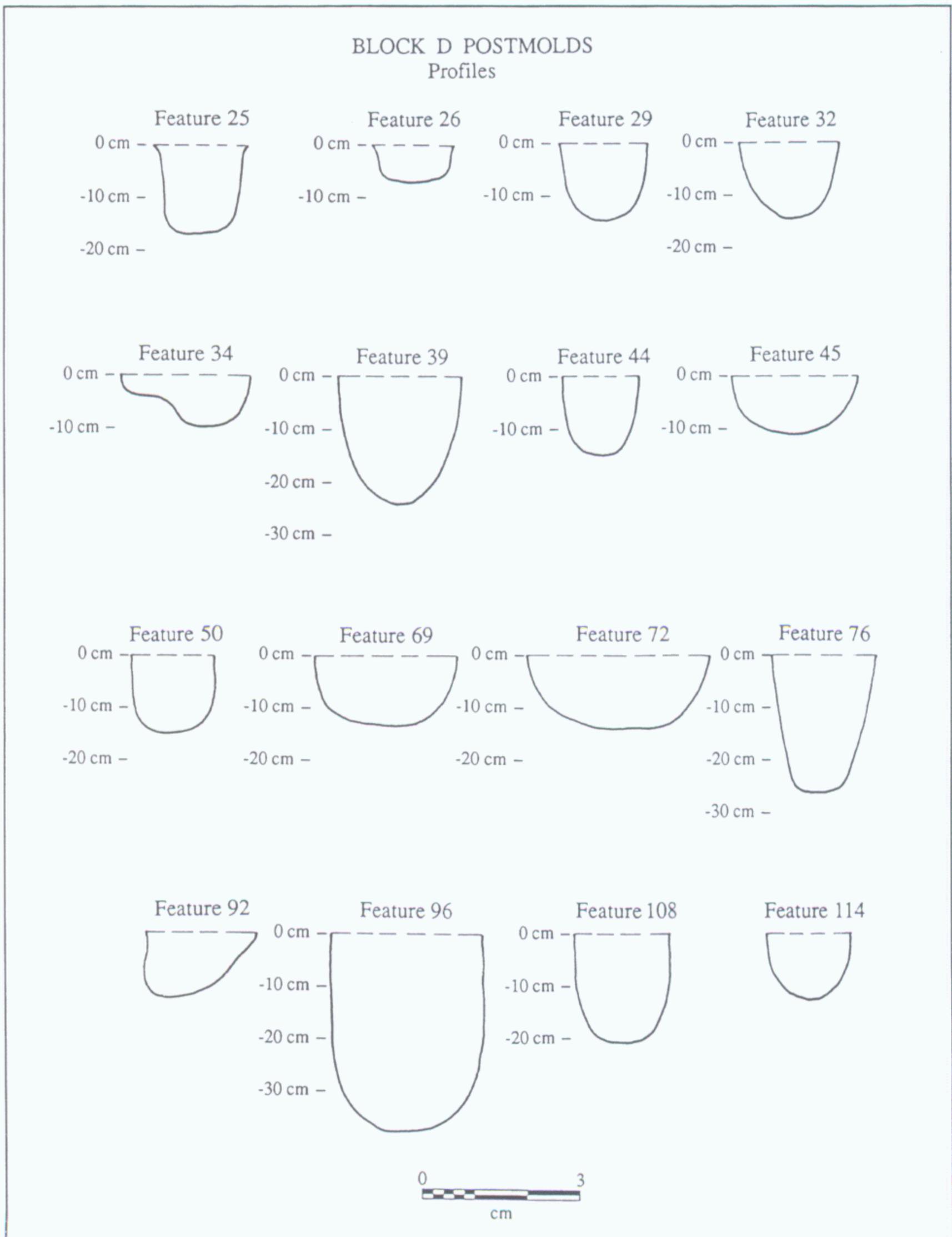


Figure 96. Profile drawings of typical postmolds and small pits from Block D.



Figure 97. Photographs of feature excavation in Block D.

Table 26. Feature contents for Block D and associated test pits (postmolds and small pits).

Artifact Type	Feature Number																	Total	
	14	15	19	20	22	27	29	32	51	56	69	72	79	93	96	108	109		117
Pottery																			
Lamar Complicated Stamped (rim)	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
Lamar Complicated Stamped (body sherd)	0	0	0	0	1	0	0	0	1	0	1	0	0	0	0	0	0	1	4
Lamar plain grit tempered (body sherd)	0	0	0	0	0	2	1	0	0	0	0	0	1	0	1	0	0	0	5
Lamar plain grit tempered (noded rim)	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lamar Incised (bold > 2 mm) body sherd	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	2
Lamar Incised (medium 1-2 mm) notched rim	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Lamar medium incised & punctate (body sherd)	0	0	0	0	0	0	0	1	0	0	0	1	0	0	0	0	0	0	2
Burnished grit tempered (Lamar)	0	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0	3
Subtotal (pottery)	0	1	1	2	1	4	1	1	1	0	1	1	1	0	2	0	1	1	19
Lithics																			
Flake tool (burinated) quartz	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
Tertiary Flake > 2 cm (chert)	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
Tertiary Flake < 2 cm (chert)	1	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
Biface thinning flake < 2 cm (chert)	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1
Flake fragment < 2 cm (chert)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Flake fragment < 2 cm (crystal quartz)	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	1
Fire-cracked rock	0	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0	2
Daub	0	0	0	0	0	0	0	0	3	0	0	0	0	0	1	0	0	0	4
Subtotal (Lithics, etc.)	1	0	0	0	2	0	0	0	5	1	0	1	0	1	3	1	0	0	15
Total	1	1	1	2	3	4	1	1	5	1	1	2	1	1	5	1	1	1	34

In addition to cultural features, a few natural subsoil intrusions were found in Block D. A few large tree stains were found and some were partially excavated. One was assigned feature number 24, which was examined to be sure it was not a looted burial pit. Table 27 lists artifacts recovered from the feature. Figure 98 shows excavation of Feature 24 in progress. The feature produced a mixture of artifacts of twentieth century filling.

Table 27. Artifacts recovered from Feature 24.

Artifact Type	Count
Utilized flake (sugar quartz)	1
Groundstone fragment	1
Clear bottle glass (modern)	8
Olive green bottle glass	1
Unidentified metal (ferrous)	2
Blue edge whiteware	1
White glazed stoneware	1
Plastic bottle cap	1
Miscellaneous plastic fragments	5
Total Artifacts	21



Figure 98. Photograph of Feature 24 which was identified as an uprooted tree with a mixture of fill from several occupations.

Feature 24 is a decayed tree stump that was filled in modern times, possibly during the most recent period of landscaping. A number of root holes extended down below the filled cavity, indicating the feature was indeed a tree. The remaining tree stains in Block D contained compact fill and only aboriginal material. With the exception of Feature 24, artifacts found in non-cultural features were not saved. Excavated tree stains were refilled when the non-cultural determination was made. The refilled pits are visible in some of the Block D photographs as discolorations.

Features found in Block D include an abundance of postmolds and relatively few small pits (see Figure 95). Artifacts recovered from these features indicate association with the late Mississippian Bull Creek phase (Figure 99).

Unfortunately, no large, trash-filled pits were encountered within the confines of the corridor boundaries. As a consequence, the artifact counts from the features are relatively low, with substantially larger artifact counts recovered from the test pits. Test Pits 7-8 were excavated within the Bull Creek structure boundaries and Test Pits 6-9 were excavated outside the structure (see Chapter 7). A detailed examination of subsistence remains is presented in Chapter 14.

Figure 100 shows the distribution of all confirmed and possible features in Block D. Confirmed natural disturbances such as tree roots and animal burrows have been removed. A dashed line shows one approximation of the boundaries of the structure. Figure 101 shows two views of the structure following final cleanup.

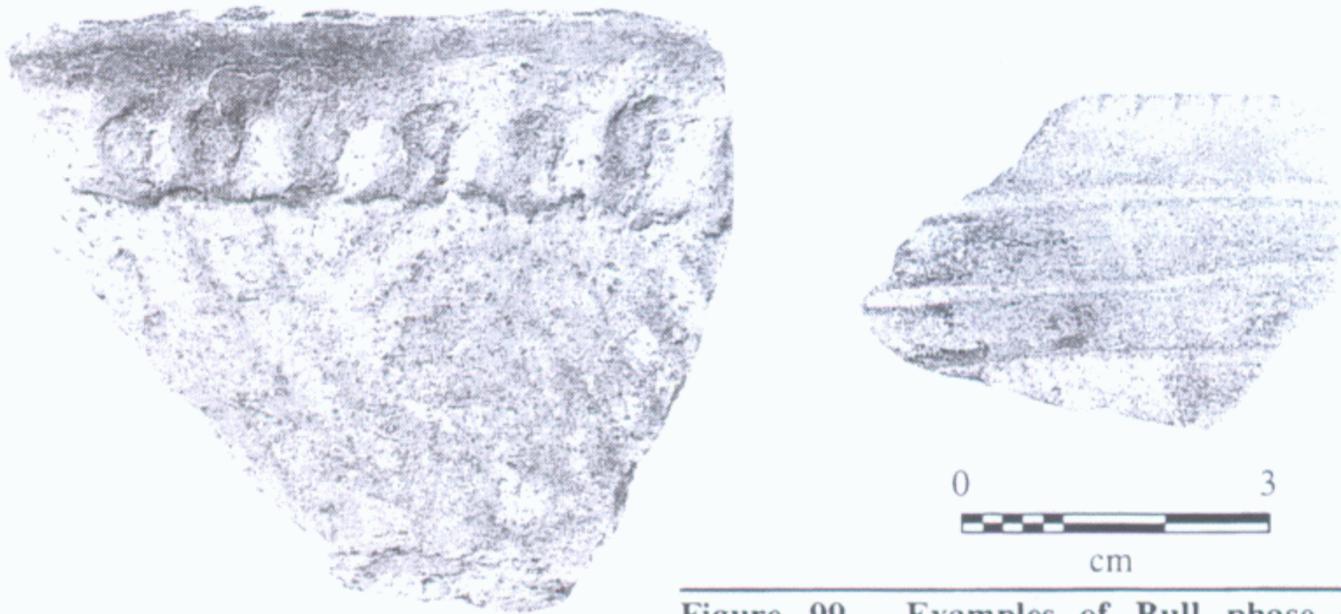


Figure 99. Examples of Bull phase complicated stamped and incised sherds from structure postmolds.

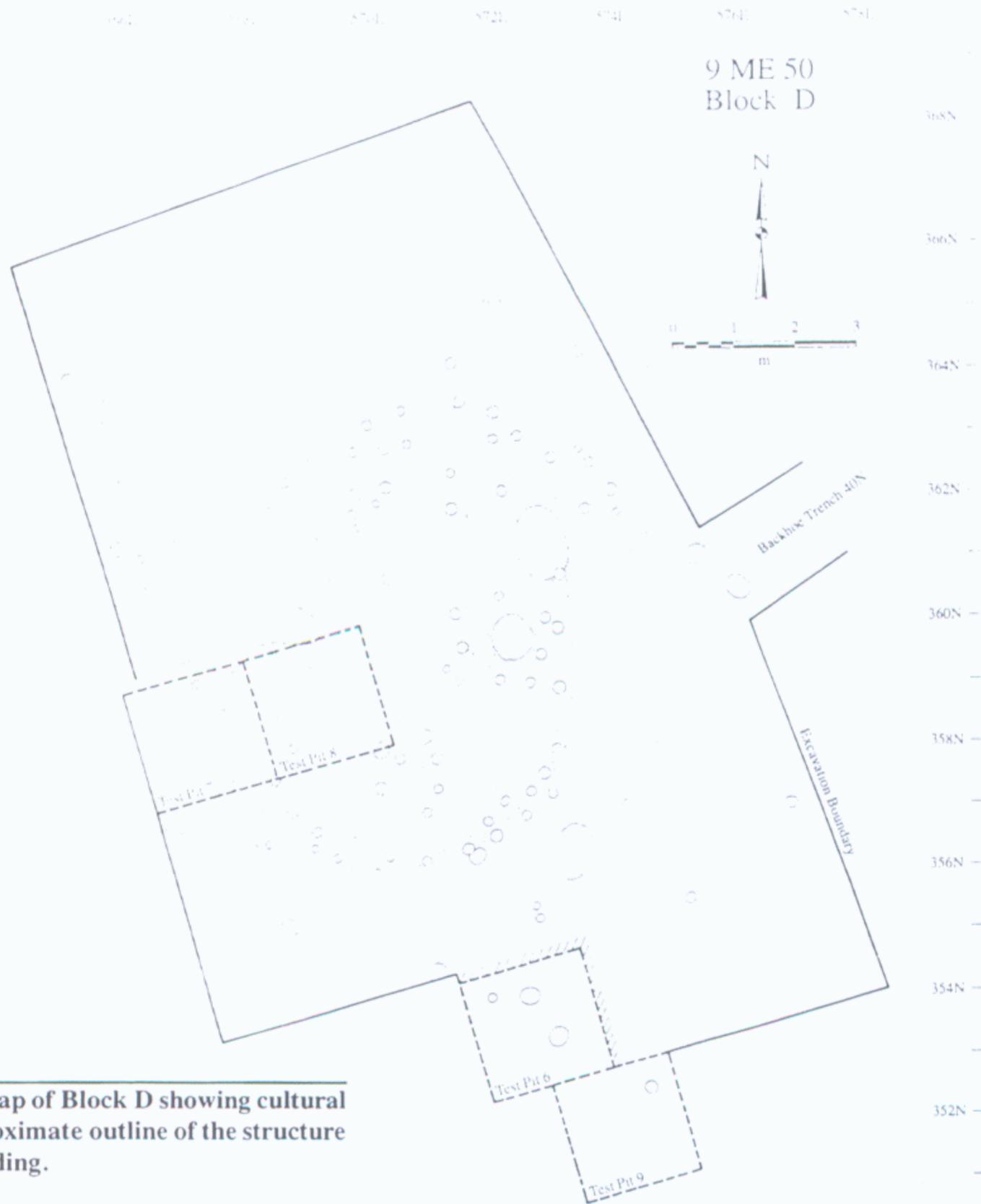


Figure 100. Plan map of Block D showing cultural features. The approximate outline of the structure is indicated by shading.



Figure 101. Photographs of the Bull Creek phase structure during final cleanup (some postmolds on the northern edge have not been excavated).

The Bull Creek phase structure in Block D is subrectangular in shape. The outline is basically square with rounded corners and would have been approximately 7 m (23 ft) wide. The structure contains large interior posts, the largest of which, Feature 96, was 28 cm in diameter and 35 cm deep (see Figure 96 for profile drawing). The structure also contains a number of additional interior posts which may indicate interior partitions.

While now designated as part of the Victory Drive site, our excavation of Block D, as well as Block B, shows the area is actually part of the Bull Creek village site (Lester 1938). The identification of a structure in Block D indicates the Bull Creek village extended at least 450 m from the mouth of Bull Creek. The excavated data from Block D are informative for comparing structure styles in the Bull Creek Village, a topic that will be examined further in Chapter 15

Chapter 11

Material Remains: Lithics

Cultural remains recovered from the Victory Drive site are examined in four chapters. The present chapter deals with chipped stone and ground stone. Subsequent chapters will consider pottery, Euro-American artifacts, and subsistence remains. On Victory Drive and the contiguous Bull Creek site nonperishable artifacts are dominated by pottery. This observation is particularly true for the Bull Creek site. On the Bull Creek site, the people of the primary component, the late Mississippian Bull Creek phase, made little use of chipped.

One exception is the relatively minor Archaic component. A number of projectile points were recovered during the WPA excavations (Lester 1938), and are useful for interpreting the Archaic occupation at the Victory Drive site. The Archaic, more so than any other component, displayed the broadest distribution of artifacts. As previously noted, we believe that some of the projectile points found during the WPA excavations on the Bull Creek site were actually found within the present boundaries of the Victory Drive site.

Distributional patterns differed across the Victory Drive site. While a general scatter of Archaic lithics is evident, a distinctive lithic industry was found spatially associated with the early Mississippian period Averett component. As will be shown in this presentation, the primary area displaying evidence of this industry is restricted to the northern part of the Victory Drive site.

The lithic artifacts from the Victory Drive site may be examined in several ways. A relatively small number of these artifacts are temporally diagnostic, mainly projectile points with diagnostic characteristics. Observation and measurement of specific attributes may be used to compare projectile points of

contemporary occupations on other sites. The larger collections of Archaic points from the WPA investigations are important in this respect. Identification of lithic raw material types is also important. People of different time periods often utilized stone from very distinct sources. In the case of the Victory Drive site, distinguishable raw materials include chert, crystal quartz, sugar quartz, and vein or milky quartz. Manufacturing technologies may also be examined through careful sorting of debris. At the Victory Drive site, a particular technology is evident in the Averett occupation, where small cobbles of very pure crystal quartz are reduced by bipolar flaking.

With the exception of small amounts of lithic material found in Averett features, the majority of the stone found on the site came from surface and plowzone contexts. For that reason, relatively little specific interpretation is advisable. However, on a more general level the overall counts of material from different areas of the site are useful for site interpretation. There are clear differences in the composition of lithic remains between the northern and southern portions of the Victory Drive site.

The following two tables list all lithic artifacts found at Victory Drive during the survey and data recovery phases by type and raw material. Table 28 contains all material from the northern portion of the project area and represents the focus of the Averett occupation. Table 29 lists material from the southern portion, which is dominated by late Mississippian Bull Creek phase and historic Creek occupations. Archaic lithics extend across both areas. As noted in earlier chapters, the two areas are separated by severely gullied terrain.

Table 28. Lithics from SAS investigations of the Victory Drive site: northern portion.

Artifact Type	Raw Material				Total Count
	C.P. Chert	Sugar Quartz	Crystal Quartz	Vein Quartz	
Late Archaic Stemmed Projectile Point	0	2	0	0	2
Mississippian Triangular Projectile Point	4	0	11	0	15
Biface Fragment	0	2	6	1	9
Trihedral	0	0	6	2	8
Unifacial Tool	0	0	0	1	1
Utilized Flake	11	2	16	0	29
Perforator	0	0	3	0	3
Wedge	0	0	4	0	4
Notched Flake	0	0	1	0	1
Total Chipped Stone Tools	15	6	47	4	72
Primary Flake > 2 cm	0	1	0	0	1
Primary Flake < 2 cm	0	0	1	1	2
Secondary Flake > 2 cm	0	6	1	1	8
Secondary Flake < 2 cm	1	3	17	0	21
Tertiary Flake > 2 cm	4	0	0	0	4
Tertiary Flake < 2 cm	9	4	23	1	37
Biface Thinning Flake < 2 cm	5	0	0	0	5
Bipolar Flake < 2 cm	0	0	67	0	67
Flake Fragment < 2 cm	9	4	27	0	40
Shatter < 2 cm	1	0	24	0	25
Core Trimming Flake < 2 cm	0	1	27	0	28
Core/Core Fragment	2	0	41	1	44
Total Debris	31	19	228	4	282
Total Chipped Stone	46	25	275	8	354
Groundstone					2
Fire Cracked Rock					58
Total Lithics					414

Table 29. Lithics from SAS investigations of the Victory Drive site: southern portion.

Artifact Type	Raw Material				Total Count
	C.P. Chert	Sugar Quartz	Crystal Quartz	Vein Quartz	
Archaic Stemmed Projectile Point	1	0	0	0	1
Biface Fragment	0	0	0	2	2
Utilized Flake	8	4	0	0	12
Burinated Flake	0	0	0	1	1
Denticulate	3	0	0	0	3
Perforator	1	0	0	0	1
Total Chipped Stone Tools	13	4	0	3	20
Secondary Flake > 2 cm	0	11	0	2	13
Secondary Flake < 2 cm	0	1	0	0	1
Tertiary Flake > 2 cm	4	0	0	0	4
Tertiary Flake < 2 cm	16	6	1	0	23
Biface Thinning Flake < 2 cm	7	0	0	0	7
Bipolar Flake < 2 cm	0	0	6	0	6
Flake Fragment < 2 cm	10	2	5	0	17
Shatter < 2 cm	1	1	3	4	9
Core Trimming Flake < 2 cm	1	0	1	0	2
Core/Core Fragment	0	0	3	0	3
Total Debris	39	21	19	6	85
Total Chipped Stone	52	25	19	9	105
Groundstone Tool					4
Fire Cracked Rock					78
Total Lithics					187

The densities of lithics vary greatly between the north and south. Because of varying degrees of disturbance, these differences are somewhat difficult to quantify. In the north, the best preserved area, examined by Test Pit 1, had a density of 37 pieces of

chipped stone per m² and a total of 44 lithics per m². In the south, the best preserved area, examined by Test Pit 6, produced a density of only 7.75 chipped stone per m² and overall only 9.5 combined lithics per m².

As previously noted, there is a general scatter of Archaic lithics across the Victory Drive and Bull Creek sites. This is reflected in the tables by similar counts for raw materials associated with that occupation: chert, sugar quartz and vein quartz. The extent of the Archaic scatter is confirmed only near the bluff edge where our investigations took place. It is not known how far the scatter extends away from the bluff. With this in mind, it is evident that the differences in lithic densities between the north and south areas reflect the Averett occupation's lithic industry which made extensive use of crystal quartz. Figure 102 illustrates the pronounced differences in raw material percentages between the two areas.

Other differences in lithic composition between the two areas generally reflect differences in types and intensity of occupation. Basically the northern collections display a higher tool diversity, which is to be expected with the more sedentary Averett occupation. The southern area reflects the limited tool diversity of the more ephemeral Archaic occupation. The most important information derived from the Victory Drive lithics relates to the Averett occupation. The earlier occupations are best viewed through examination of projectile points, particularly through comparison with the WPA material (Figures 103 - 105).

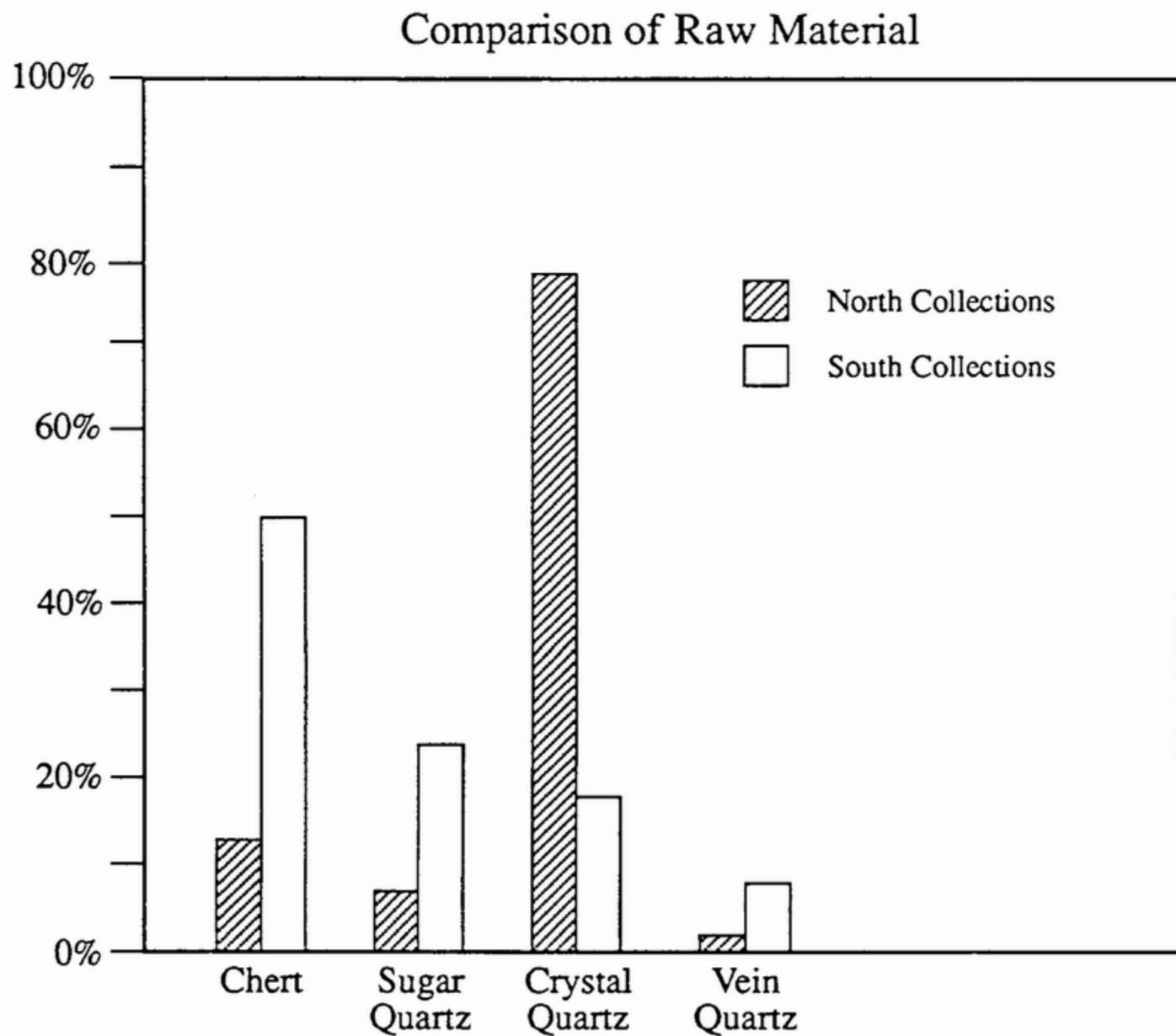


Figure 102. Graph comparing raw material differences in north and south areas of the Victory Drive site.

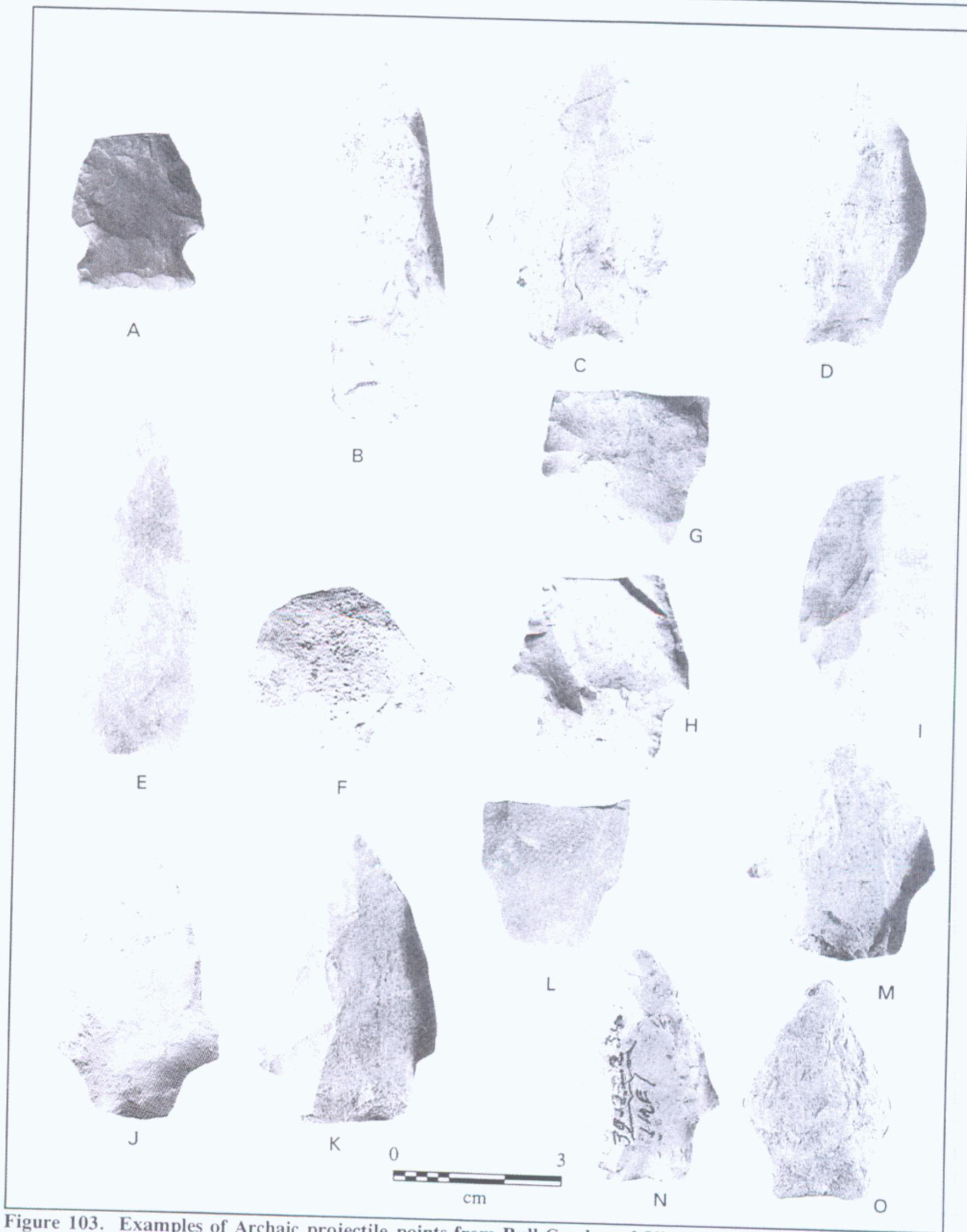


Figure 103. Examples of Archaic projectile points from Bull Creek and Victory Drive sites.

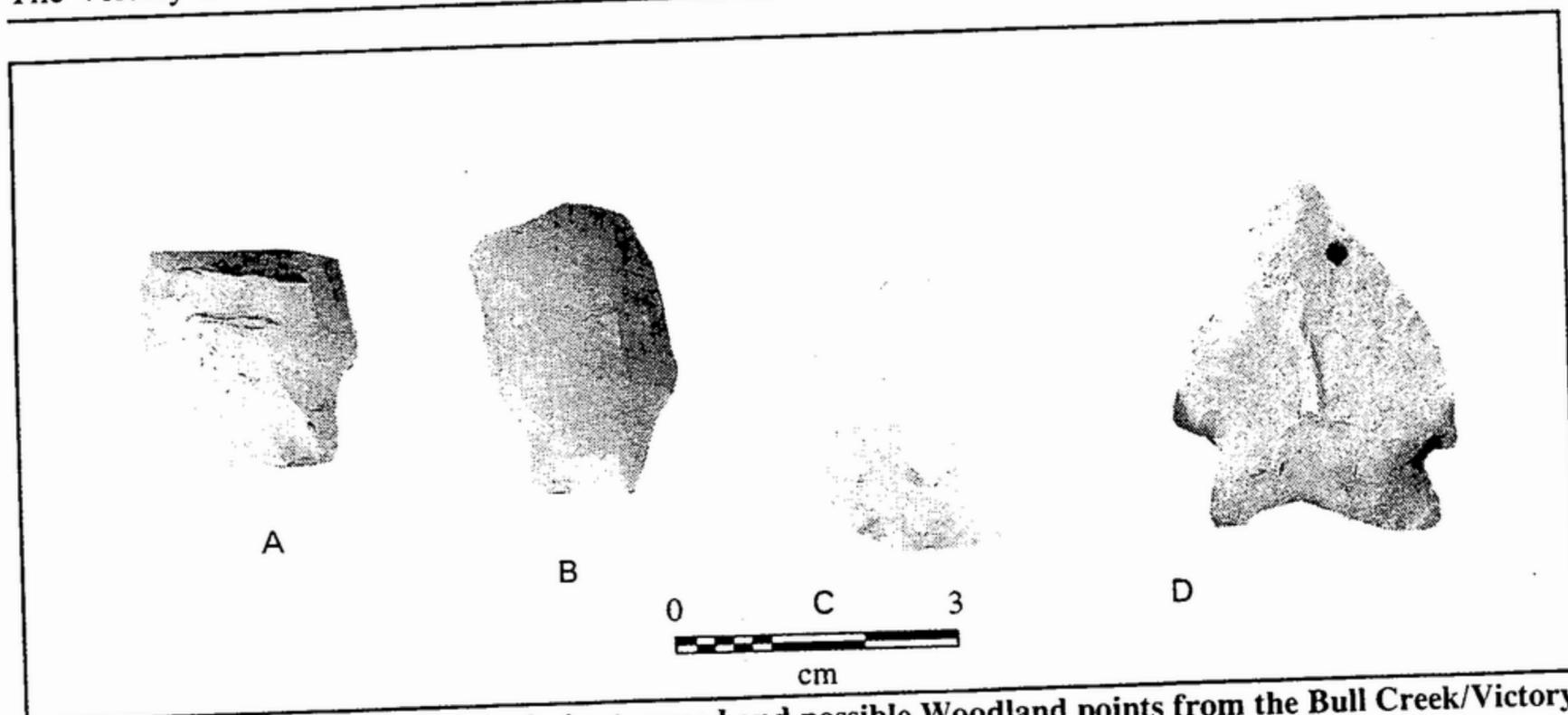


Figure 104. Examples of small Archaic stemmed and possible Woodland points from the Bull Creek/Victory Drive sites (see Table 2 for data).

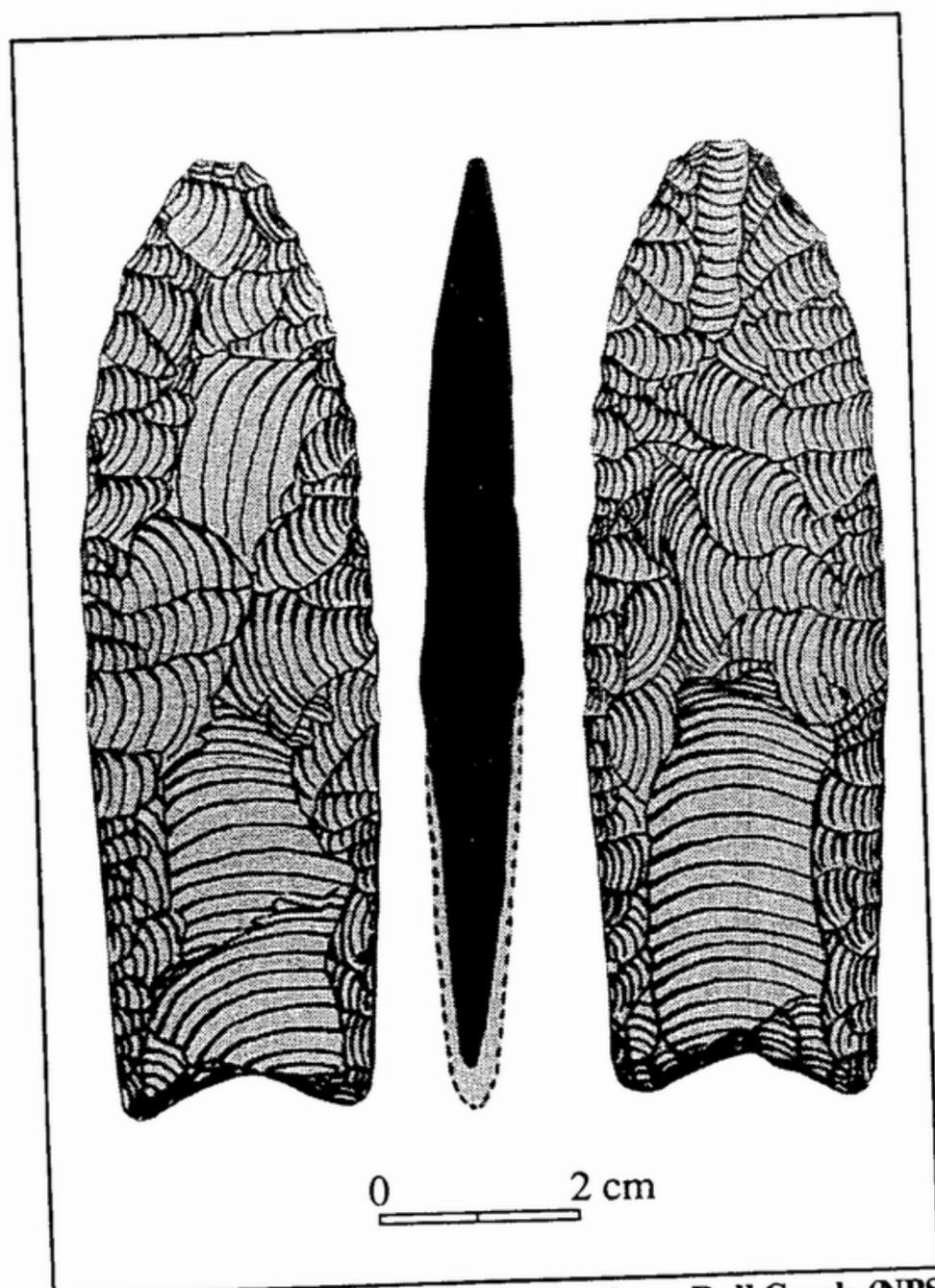


Figure 105. Drawing of fluted point from Bull Creek (NPS files).

The majority of the projectile points illustrated in Figures 103 and 104 probably date to the Late Archaic period. Certain haft characteristics, such as the pronounced tapered stem and concave base of certain examples, may be associated with Middle or Late Archaic point types of the Coastal Plain, such as Hamilton (Bullen 1975:38). The illustrated examples represent the primary Late Archaic point variety on the site (Figure 103 c-h, j-o) and share a number of characteristics with the Late Archaic point type Savannah River Stemmed (Coe 1964). According to Coe's definition, these points are broad and relatively thick with straight to slightly rounded blade edges; stems are straight to slightly contracting and bases are primarily concave but may be straight. Stem edges are often steeply flaked producing a very strong haft (Coe 1964:44). The illustrated points are made predominantly from Coastal Plain chert and sugar quartz. Many examples are crudely flaked and several are severely resharpened.

Table 30. Attributes of Archaic and Woodland projectile points from Bull Creek/Victory Drive site.

Projectile Point Type	Collection Provenience	Metric Attributes			Haft Width	Haft Length	Raw Material	Notes	Figure Number
		Length	Width	Thickness					
Kirk Corner Notched	NPS 39-22284	---	27 mm	N/A	19 mm	11 mm	grey chert	ground haft	Figure 2 a
Kirk Stemmed?	NPS 39-22255	63 mm	31 mm	11 mm	21 mm	12 mm	Coastal Plain chert	patinated chert	Figure 2 b
Archaic Stemmed	NPS 39-22237	51 mm	35 mm	12 mm	27 mm	17 mm	Coastal Plain chert	tapered stem, incurvate	Figure 2 c
Archaic Stemmed	NPS 39-22208	50 mm	28 mm	10 mm	25 mm	13 mm	sugar quartz	tapered stem, incurvate	Figure 2 d
Archaic Stemmed	NPS 39-22211	63 mm	24 mm	11 mm	20 mm	11 mm	sugar quartz	tapered stem, incurvate	Figure 2 e
Archaic Stemmed	9Me50 Block B	---	37 mm	12 mm	26 mm	10 mm	Coastal Plain chert	tapered stem, incurvate	Figure 2 f
Archaic Stemmed	NPS 39-22199	---	35 mm	N/A	22 mm	14 mm	Coastal Plain chert	tapered stem, incurvate	Figure 2 g
Archaic Stemmed	NPS 39-22227	---	39 mm	N/A	27 mm	15 mm	Coastal Plain chert	tapered stem, incurvate	Figure 2 h
Archaic Stemmed	9Me1 RR Levee	---	30 mm	15 mm	15 mm	12 mm	Coastal Plain chert	expanded stem	Figure 2 i
Archaic Stemmed	NPS 39-22218	---	26 mm	8 mm	22 mm	15 mm	sugar quartz	contracted stem	none
Archaic Stemmed	NPS 39-22209	52 mm	29 mm	11 mm	19 mm	10 mm	vein quartz	tapered stem, flat	Figure 2 j
L..Archaic Stemmed	NPS 39-22285	50 mm	34 mm	9 mm	23 mm	11 mm	Coastal Plain chert	straight stem	Figure 2 k
L..Archaic Stemmed	9Me50 surface	---	30 mm	11 mm	24 mm	15 mm	sugar quartz	tapered stem, flat	Figure 2 l
L..Archaic Stemmed	NPS 39-22229	39 mm	35 mm	11 mm	25 mm	14 mm	Coastal Plain chert	straight stem	Figure 2 m
L..Archaic Stemmed	NPS 39-22234	41 mm	25 mm	10 mm	20 mm	11 mm	Coastal Plain chert	straight stem	Figure 2 n
L..Archaic Stemmed	NPS 39-22222	38 mm	26 mm	8 mm	20 mm	12 mm	metavolcanic	straight stem	Figure 2 o
L..Archaic Stemmed	NPS 39-22202	50 mm	32 mm	10 mm	20 mm	12 mm	vein quartz	straight stem	none
L..Archaic Stemmed	NPS 39-22220	---	34 mm	12 mm	17 mm	break	sugar quartz	straight stem	none
L..Archaic Stemmed	NPS 39-22286	---	40 mm	13 mm	22 mm	break	Coastal Plain chert	stem missing	none
L..Archaic Stemmed	NPS-no prov.	---	26 mm	N/A	19 mm	10 mm	vein quartz	straight stem	Figure 3 a
L..Archaic Stemmed	NPS-no prov.	---	27 mm	N/A	18 mm	10 mm	vein quartz	straight stem	Figure 3 b
Triangular Biface	NPS 39-22223	42 mm	---	9 mm	---	---	vein quartz	basal grinding	Figure 3 c
Jack's Reef	NPS 39-22257	37 mm	31 mm	7 mm	22 mm	10 mm	Coastal Plain chert	no grinding	Figure 3 d

Other illustrated points indicate the existence of additional minor occupations. Two Early Archaic points (Figure 103 a-b) and one probable Late Woodland point (Figure 104 d) were found on the Bull Creek site. The most intriguing point is illustrated in Figure 105. This large Clovis point was found in the 1930s but has since been lost. The background of the point's discovery is detailed in Chapter 3 of this report. The point has been cited frequently in the archeological literature of the area and is illustrated as a type example for the "Eastern Folsomoid" tradition for the Walter F. George region (DeJarnette 1975: Figure 14 1A). Based upon WPA-era drawings, the point measures 96 mm in length and 28 mm in width. Fluting on opposing faces is measured at 38 and 40 mm. The point is made from Coastal Plain chert. As previously noted, the location of the point given by Patterson (1936) places it near the present boundary of the Victory Drive and Bull Creek sites. There has been no additional Paleoindian material recovered.

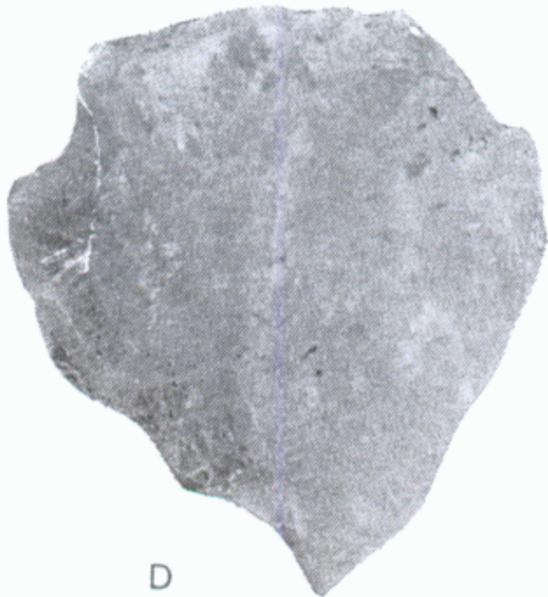
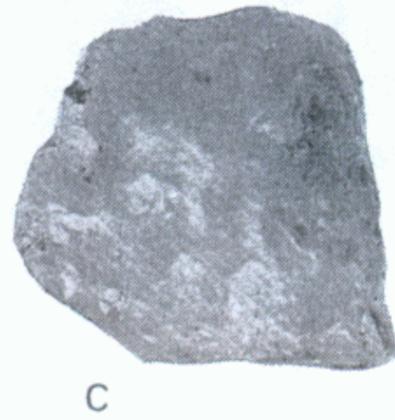
Averett Phase Lithic Assemblage

Chipped stone tools and debris compose the bulk of the lithics from the northern portion of the Victory Drive site. While some of this material was recovered from secure contexts, such as the midden deposit of Test Pit 1 and a few small pits, most of the lithics from the area were recovered from the plowzone. Based upon material from good context, the Averett inhabitants of the site focused on the exploitation of crystal quartz. While the source of the material was not precisely determined, it appears to be a highly localized resource. Examination of lithic collections from contemporary sites in the region, such as the Averett site (Chase 1963) and Florence Marina (Ledbetter and Braley 1989), shows minimal use of crystal quartz. Based on the presence of rounded cortex on some debris, the quartz site was probably recovered from nearby gravel beds.

Because of the small size of the raw material packages utilized by the Averett people, most of the tools and debris are quite small. Due to the difficulty in handling these pebbles of raw material, a reduction strategy was used that was most efficient for producing flakes for tool production. A bipolar technique was employed which utilized an anvil as a hard surface in conjunction with a hammerstone. The resulting flakes often display damage at opposing ends, a consequence of the dual impacts of the hammerstone and the anvil. Figures 106 and 107 illustrate examples of the lithic remains resulting from bipolar reduction, enlarged to illustrate detail.

The most recognizable tools associated with the Averett occupation are small triangular projectile points. The small collection of points was recovered entirely from the northern portion of the project area, which corresponds to the primary occupation area of the Early Mississippian Averett component. A total of 15 bifaces could be identified as various stages of this point type. This total includes preforms and fragmentary points. There were eight finished points which could be at least partially measured. The majority of all projectile points (N = 11) are made from an extremely pure grade of crystal quartz. Some broken preforms retain characteristic opposing flake scars of bipolar reduction. A minority of the points are made from moderate to high grade Coastal Plain chert. The curvature evident on the chert points indicates they were made from tertiary flakes. It would appear, then, that these points were not produced exclusively from bipolar techniques, but it is likely that most of the points produced on the site utilized crystal quartz and a bipolar production technique. Figure 107 illustrates examples of the Mississippian Triangular points from the Victory Drive site. Table 31 lists attributes and measurements for the most complete points from the Victory Drive site. Breakage patterns on these examples is primarily indicative of use rather than tool production failures.

BIPOLAR CORES



CORE-TRIMMING FLAKES



BIPOLAR FLAKES

DORSAL

VENTRAL



DORSAL

VENTRAL



DORSAL

VENTRAL



DORSAL

VENTRAL



DORSAL

VENTRAL



A, Feature 3; B-F, Test Pit 10; G-H, Test Pit 4; I, Feature 5; J, Feature 57

Figure 106. Examples of artifacts produced through bipolar reduction (artifacts are enlarged 280%).

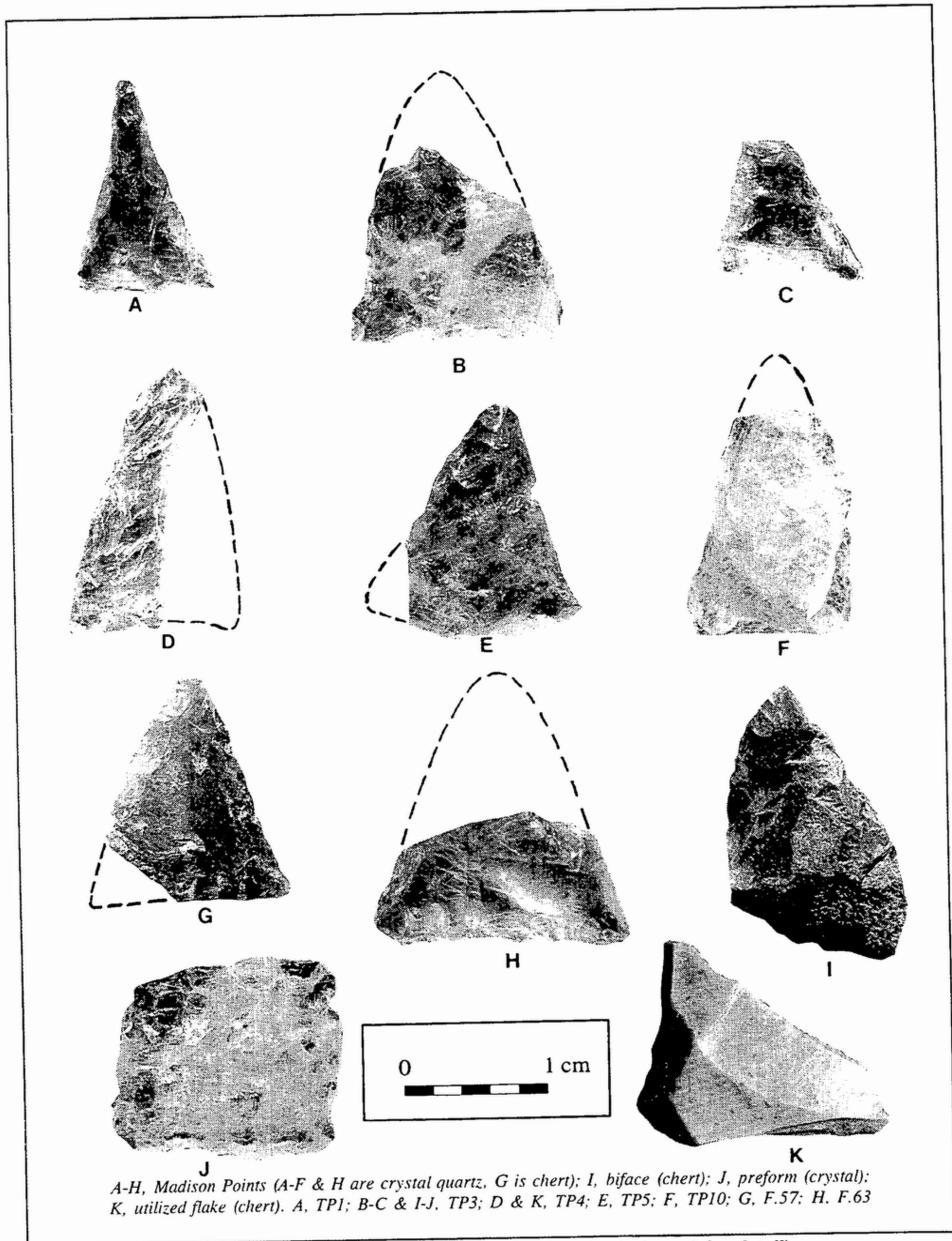


Figure 107. Examples of Averett tools from the Victory Drive site (enlarged for detail)

Table 31. Attributes of Mississippian Triangular Points from the Victory Drive site.

Provenience	Length	Width	Thickness	Wear/Breakage Patterns
Crystal Quartz				
TP1 L.4	14.0 mm	9.1 mm	2.8 mm	complete, perforator-like distal end
TP3 L.2	----	12.8 mm	3.7 mm	broken and reworked distal end of blade
TP3 L.2	----	9.3 mm*	2.9 mm	tip missing, base snapped and reworked
TP4 L.2	18.5 mm	----	3.1 mm	snapped longitudinally near mid-portion of blade
TP5 L.2	15.1 mm	12.0 mm	3.5 mm	damaged base/ear projection snapped
TP10 L.2	----	10.9 mm	5.0 mm	tip missing, crude flaking-possible preform
Feature 63	----	16.0 mm	4.8 mm	break/snap at mid-blade
Means	15.9 mm	12.2 mm	3.7 mm	
Chert				
Feature 57	15.5 mm	---	2.1 mm	tip damage and base/ear damage
Means	15.8 mm	11.8 mm	3.5 mm	

*Because basal area is reworked from a broken point, the measurement is not included in determining mean.

The small triangular points were compared to larger collections from two area sites with major Averett components, Carmouche (9Ce21) on Fort Benning and Florence (9Sw158) in Stewart County. The resulting figures are listed in Table 32. The

comparison with Florence and Carmouche shows the Victory Drive points to be shorter and slightly more narrow. Thickness of the Victory Drive points falls in the middle range. The Florence points, which are made from chert, are actually slightly thicker.

Table 32. Comparison of Mississippian Triangular points from three Averett sites.

	Victory Drive	Florence	Carmouche	Total
Sample Size	9	35	43	87
Length Range	14.0-18.4 mm	10.2-26.7	14.0-33.0	10.2 - 33.0 mm
Length Average	15.8 mm	18.7 mm	18.8 mm	51 points average 18.4 mm
Width Range	9.1-16.0 mm	8.3-18.7	9.0-20.0	8.3 - 20.0 mm
Width Average	12.2 mm	12.8 mm	12.4 mm	81 points average 12.4 mm
Thickness Range	2.1-5.0 mm	1.8-6.5	2.0-5.0	1.8 - 6.5 mm
Thickness Average	3.5 mm	3.8 mm	3.3 mm	87 points average 3.5 mm

The remaining chipped stone tools found in the Averett assemblage are composed of a variety of expedient flake tools (see Table 28). One category of crudely triangular, perforator-like implements is tentatively designated by the term trihedral. The term usually refers to rather formalized, three sided, perforator-like tools often found on sites along the Gulf Coast (Thomas et al. 1993). The tools found at Victory Drive appear to be perforators made from core trimming flakes, which produces the triangular appearance.

Other tools include small utilized flakes which may be termed microliths. According to previous research, tools of this sort are selected from flakes of specific size and shape for use in a variety of cutting and scraping tasks (Neumann 1995). A typical example was illustrated previously in Figure 107 k. Figure 108 illustrates optimal flake shapes used to produce these tools. The illustrated tool in Figure 107 could have been hafted at the tapered end extending to the right of the photograph. Apparently, these tools were often used as compound tools when hafted.

Groundstone from Averett phase contexts consists of a pitted cobble from Feature 5. The tool shows irregular pitting suggesting use as an anvil stone.

In summary, the analysis of lithics from Victory Drive illustrates temporal distinctions in

selection of raw materials for use in tool production, differences in reduction strategies and some variation in tool types for different components. The Archaic occupations display evidence of utilization of raw materials needed to produce larger tools, while the Averett occupations produced evidence of a reduction strategy needed to reduce small packages of raw material for production of a variety of tools.

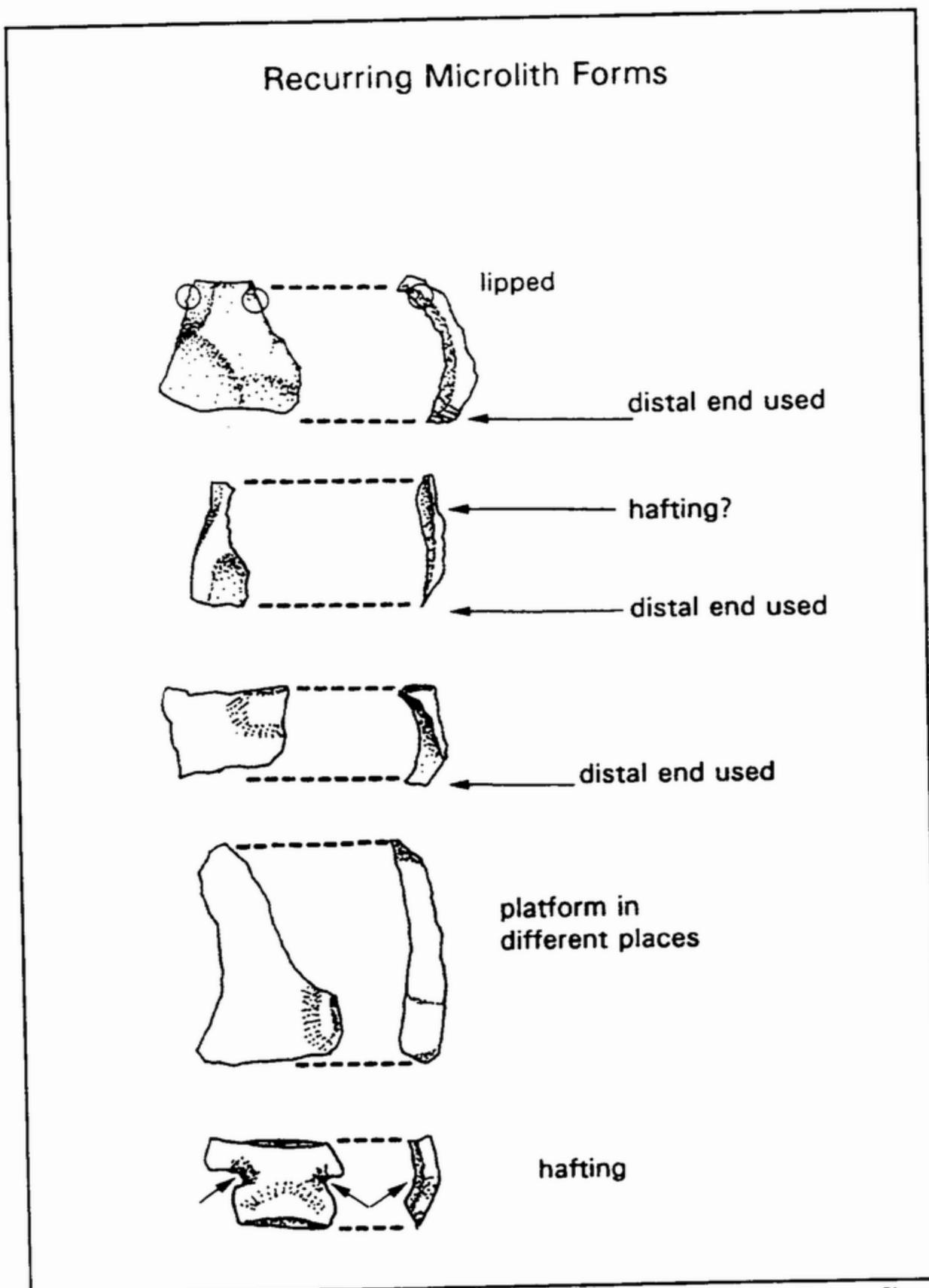


Figure 108. Illustrations of microliths (from Neumann 1995: figure 2).

Chapter 12

Aboriginal Pottery

Analysis of pottery is an important technique for examining and interpreting various aspects of aboriginal occupation at the Victory Drive site. Research issues are both temporal and site specific. Substantial excavated collections of pottery have now been procured from three major occupations along the length of the contiguous Victory Drive and Bull Creek sites. These occupations span the period of circa A.D. 900 to 1800. Collections from the current work at Victory Drive include ceramics from the early Mississippian Averett phase (A.D. 900 to 1300), the late Mississippian Bull Creek phase (A.D. 1400-1550), and the historic Creek, Lawson Field phase (A.D. 1715-1835). Previous excavations had produced collections dominated by Bull Creek phase ceramics (Lester 1938; Kelly 1950; Schnell 1963).

The Victory Drive site project area excavations produced data most valuable for examining the Averett and Lawson Field phase occupations. Relatively small amounts of Bull Creek phase ceramics were recovered from the Victory Drive project area. Material recovered from past excavations at Bull Creek has been thoroughly covered in a separate report (Ledbetter 1995c). The results of that analysis will be only summarized here.

The focus of this chapter will be directed to the analysis of surface treatment and decorative motifs that should have temporal significance in vessel form analysis. Vessel form analysis will provide data for contrasting the three occupations with respect to site type and intensity of occupation. Information relevant to pottery of the Bull Creek phase will include previously unpublished compilations of data from sundry investigations and the conclusions of our reexamination of surviving collections.

Early Mississippian Pottery: Problems Relating to Identification

Based largely upon an examination of the available archeological literature for the Columbus area, which largely consist of the writings of David Chase, an early Mississippian Averett phase occupation was identified for the Victory Drive site following the survey phase (Ledbetter 1995b:69). The assessment was based primarily upon the association of predominantly plain, sand and grit tempered pottery with small triangular projectile points.

Following laboratory analysis, but prior to submission of radiocarbon samples, the possibility arose that the Victory Drive material might actually relate to the more obscure Late Woodland Upatoi complex, defined by Chase (1959b). A number of ceramic attributes of the Victory Drive collections, as well as the lithic industry, appeared to correspond closely to Chase's descriptions of the Upatoi complex material. To complicate things further, Chase described a third predominantly plain pottery type (Woolfolk), which potentially also dates to the Late Woodland/Early Mississippian interval (Chase and Huscher n.d., Chase et al. 1994:25). Chase also referred to the pottery as Plain-X and X-Incised (Chase et al. 1994:25).

Radiocarbon samples processed following the Victory Drive site during the Riverwalk Project confirmed an Early Mississippian Averett phase date of occupation. The problem then became reconciling these dates with the different pottery complexes defined by Chase. A few researchers have suggested that the predominantly plain pottery types defined by Chase are elements of a single ceramic continuum. Gresham et al (1985:25) suggest the Averett complex is actually part of the Upatoi complex.

The Victory Drive Site

Prior to examining the "Averett" ceramics found on the Victory Drive site, the available information for the three pottery complexes, including Chase's original type descriptions for each, will be reviewed. The locations of key sites are shown in Figure 160. Included are Chase's type sites and other significant sites that have produced ceramic data used to define these pottery complexes. Of interest, the type sites for each of the three ceramic complexes all lie within a 6 km wide area, with the farthest only five km from the Victory Drive site.

In reviewing the archeological literature, it is important not only to examine the original type descriptions but also the extent to which each pottery type has been accepted or redefined by the archeological community over the years. In this regard, Averett has survived as the only widely accepted ceramic complex. The Upatoi complex has received occasional recognition and the Woolfolk complex has been largely overlooked.

Averett Ceramics

The Averett ceramic complex was first recognized by Chase after excavations in the mid-1950s (Chase 1959, 1962). Averett ceramics are predominantly undecorated, which often poses problems concerning identification and chronological placement. Until recently the Averett phase was guess-dated by the rare association in some collections of ceramics similar to Lake Jackson Decorated and Etowah Complicated Stamped (Chase 1962, 1964; Schnell et al 1981:171; Schnell and Wright 1993:29).

In the past few years, a series of radiocarbon dates has been acquired from area sites which securely date the phase to a time generally referred to as the Early Mississippian period, ca A.D. 900 to 1300 (Ledbetter 1995a).

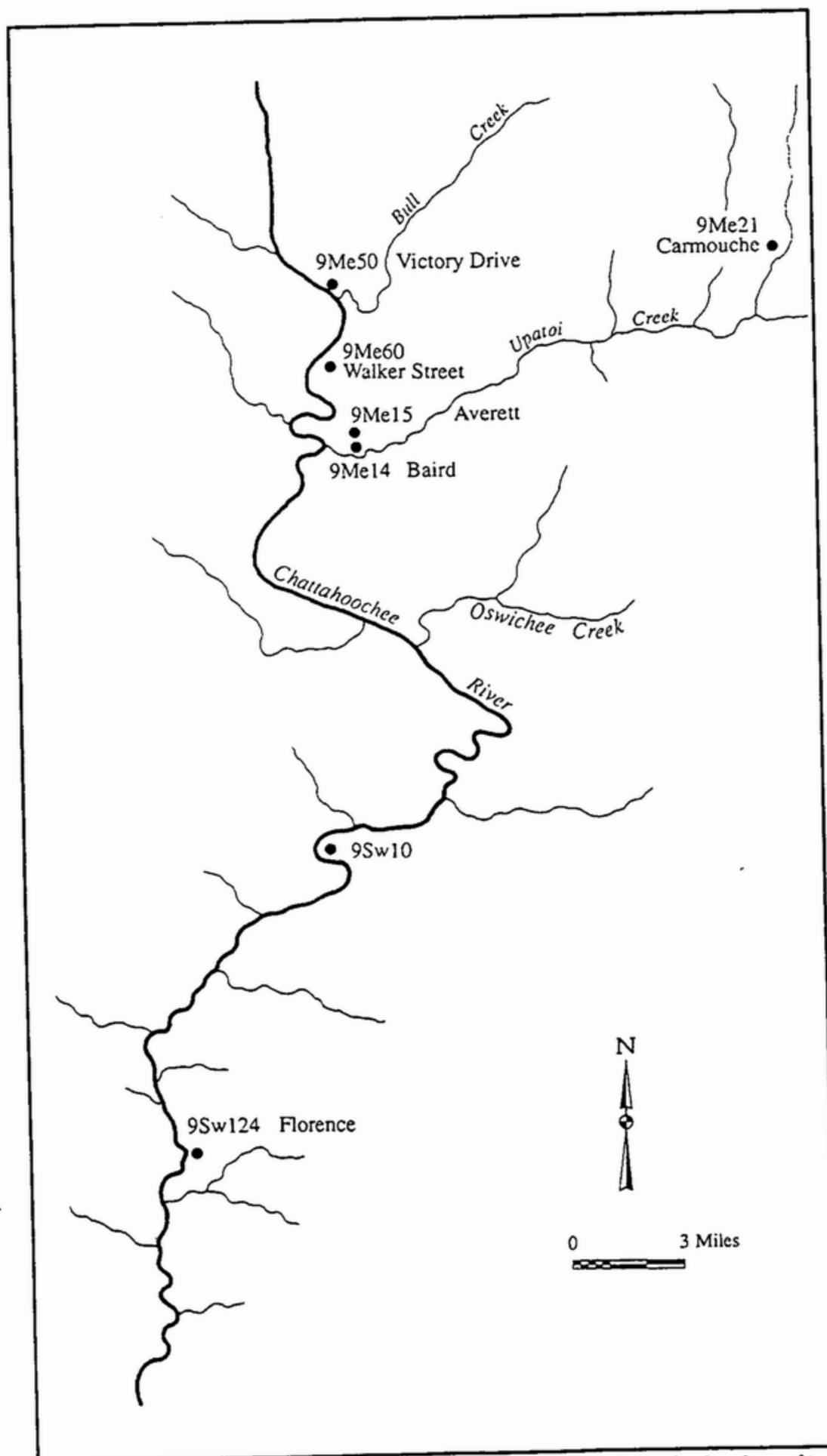


Figure 109. Locations of Late Woodland/Early Mississippian sites referenced in text.

Chase defined three types of Averett pottery. Formal type description of Averett Plain, Averett Incised, and Averett Brushed were published after excavations at the Averett site (Chase 1959a). Apparently, the only distinguishing attributes for these three types related to surface decoration. Copies of Chase's original Averett sherd and vessel illustrations and a photograph of a restored vessel are shown in Figure 110. Chase's definitions for

the three types presented on the following page, depict a hard, relatively thin, and well-made pottery with well-formed rims. Identified vessel forms include semi-conoidal bowls or jars with incurving rims and larger globular vessels with flaring rims. Figures 111 and 112 illustrate Averett vessels and sherds from other sites.

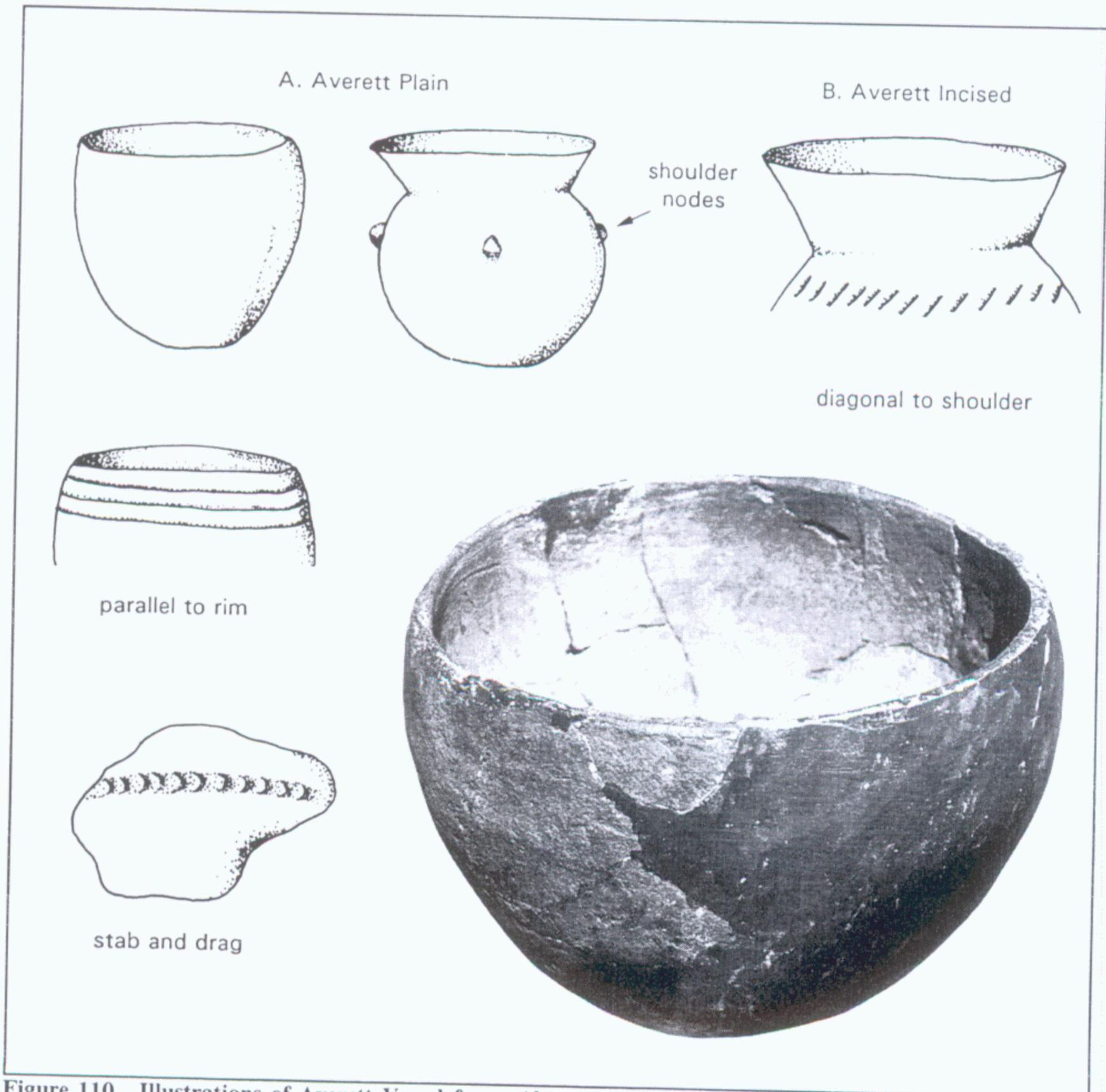


Figure 110. Illustrations of Averett Vessel forms (drawings from Chase 1959a). The photograph shows a restored Averett Plain bowl from the type site (courtesy Columbus Museum).

Original Type Descriptions of Averett Pottery (Chase 1959a)

TYPE NAME Averett Plain

Ware Characteristics

Grit tempered, light to dark gray color. Buff colored ware less common. Occurs in inverted rim, semi-conoidal vessels of from small to medium size. Also in larger vessels of the everted rim globular body type. Rims on the latter evert sharply from the shoulder. Lips are either pinched, slightly rounded or nearly "squared" in both vessel types. The "squared" lip is most common in the globular bodied vessel. Some bevelling of the lip occurs. Tooling marks appear on some specimens on the interior but rarely on the exterior surface. Appliqued "nodes" or bumps may be seen on rims of the semi-conoidal vessels. On everted rim globular types, the nodes occur on the shoulder in multiples of two. Some brushing may occur below shoulder areas in the latter type vessel. Handles or rim adornos are unknown.

Manufacture: Coiling
Temper: Fine to medium grit. Particles evenly sized. Sand temper in minority.
Paste texture: Coarse exterior. Interior smoother but somewhat grainy.
Core: Grey to black.
Hardness: 3-3.5
Thickness: Ranges from 2 to 5 mm in average sherd.

Geographical Range: Unknown. Known sites in Middle Chattahoochee Valley only.

Cultural Relationships: Unknown. Bears closest resemblance to Etowah II in terms of temper, texture, color and rim form.

Chronological position: Suspected to appear in Early Lamar time level.

TYPE NAME Averett Incised

Description: Same as Averett Plain type except for incised motifs applied to rim and shoulder areas. Those recorded to date include (a, the stab and drag technique; (b, the application of parallel incised lines in vicinity of the rim or diagonal incised lines, about 1/2 inch in length applied to the shoulder (see drawing). Although these are the only forms known to date, it is suspected there are many others.

TYPE NAME Averett Brushed

Description: All of data which pertains to Averett Plain applies to Averett Brushed as well, except surface treatment which has been lightly brushed. Strokes seem to parallel rim in most specimens.

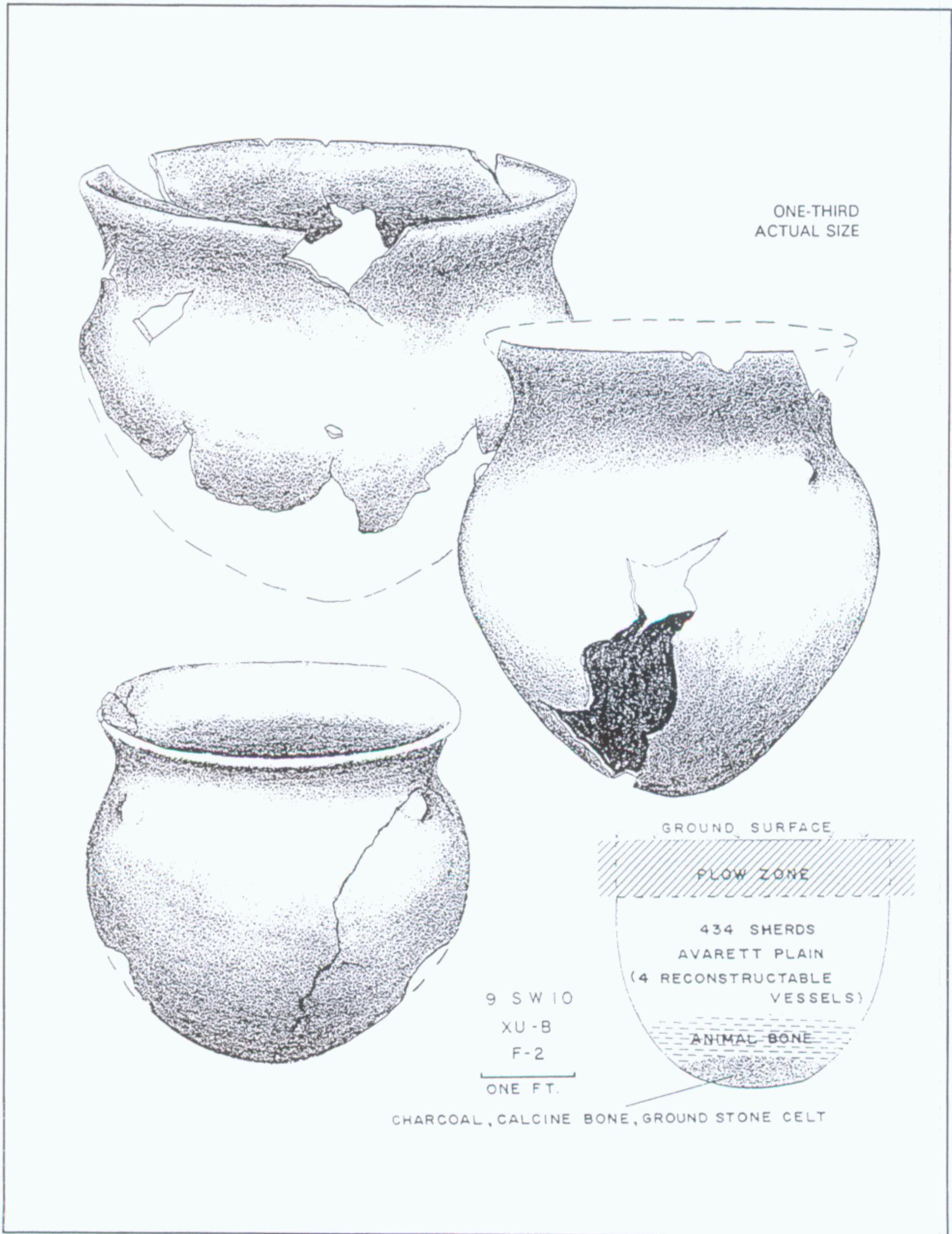


Figure 111. Drawings of Averett vessels from site 9Sw10 (adapted from Kelly et al 1961).

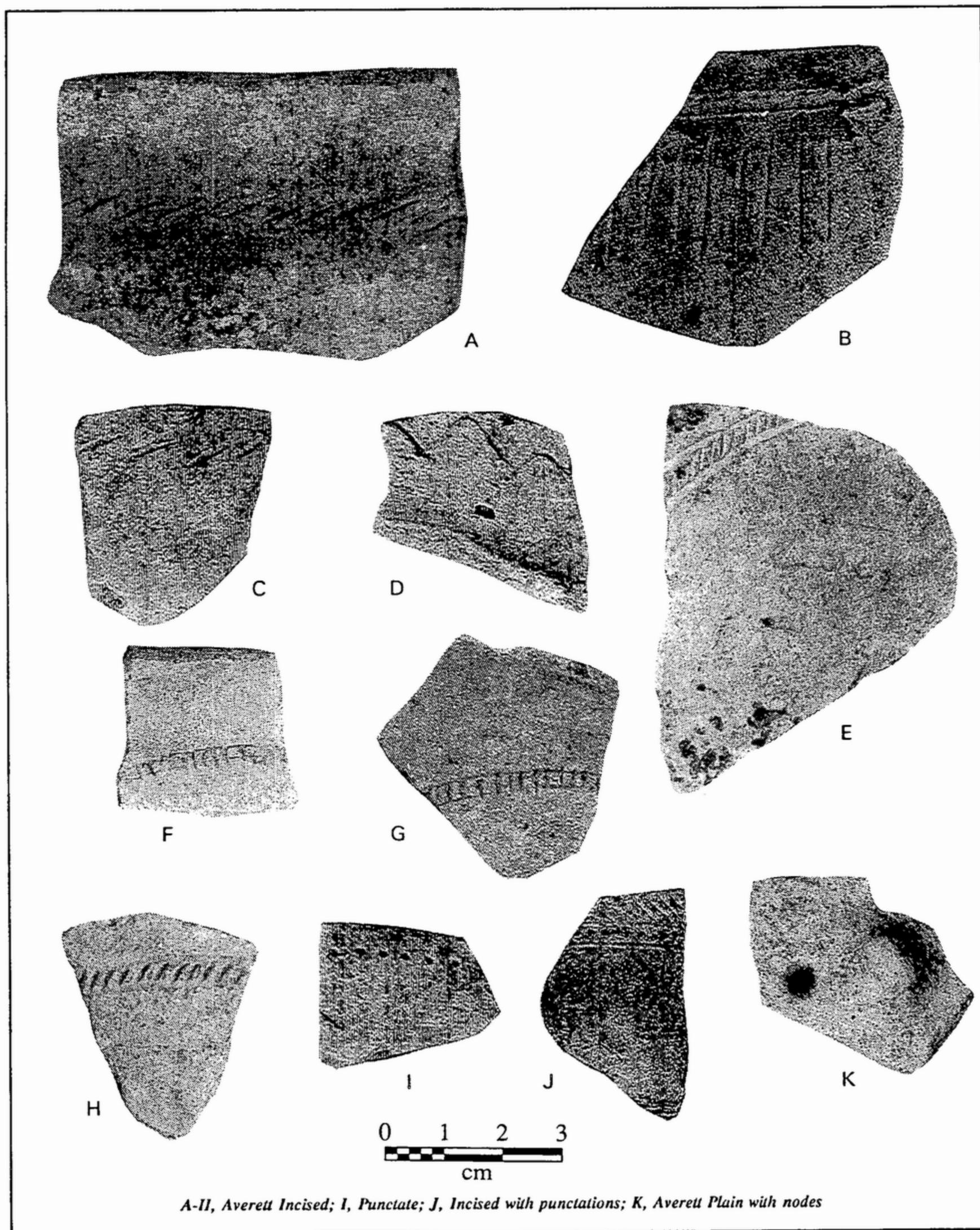


Figure 112. Illustrations of decorated Averett from Florence Marina, 9Sw124 (Ledbetter and Braley 1989: Figure 5.1).

The drawings of three reconstructed Averett vessels shown in Figure 111 are taken from the report of excavations at site 9Sw10, in Stewart County (Kelly et al 1961). The reconstructed vessels were recovered from a trash-filled pit that contained 434 Averett Plain sherds (Kelly et al 1961:8). These illustrated vessels are considered typical examples of Averett flaring rim jars.

The illustrated decorated Averett sherds shown in Figure 112 are examples from one of a very few excavations where sherd collections were of sufficient size to allow examination of a wide range of Averett decorative techniques. The sherds were recovered from excavations at the Florence Marina site, 9Sw124, (Ledbetter and Braley 1989). The rarity of decorated sherds in Averett collections is shown by comparison of overall sherd counts from Florence. A total of only 39 incised, 45 brushed, and 12 noded sherds contrast with 6216 Averett Plain sherds in this large collection (Ledbetter and Braley 1989:124). That means that less than two percent of the Averett sherds have any form of exterior modification. Etowah Complicated Stamped sherds were not found at the Florence Marina site.

In his reappraisal of the Averett complex, Chase (1962) provided evidence for determining the pottery dated to the Mississippi period instead of terminal Woodland times as originally thought (Chase 1959). The primary means of proof were the direct association of corn and Averett pottery in feature context and the presence of sherds with Etowah complicated stamping in direct association with Averett pottery (Chase 1962:9).

Chase's manuscripts originally defining the ceramic types of the Averett complex have never been widely distributed or widely read. Efforts of other researchers to provide characterizations of Averett ceramics tended to concentrate upon attributes of vessel form and associations with other pottery types.

The Oliver Basin project represented an early effort to include Chase's Averett complex in the chronological sequence of the region (McMichael and Kellar 1961). The authors provide few firm characteristics of Averett pottery, relating the following portrayal of Averett pottery: "In vessel form and rim form, some similarities are seen with Etowah and, at times, except for the distinctive Averett paste, separation of the two would be difficult" (McMichael and Kellar 1961:211).

In Hally's commentary on the Mississippi Period, published in *Early Georgia* in 1975, the pottery is described as follows:

Averett pottery is predominantly plain surfaced or brushed and in this respect has no obvious resemblance to other known ceramic complexes in the state. Contemporaneity with Etowah is suspected by similarities in vessel shape and paste and by the occasional stratified association of Etowah and Averett pottery. Most Averett sites do not yield Etowah pottery (Hally 1975:43).

In the text of Hally and Rudolph's operating plan for the Mississippi Period in the Georgia Piedmont, a more complete description of the pottery is presented. Averett pottery is identified by "incised, brushed and undecorated sand or grit tempered vessels, some of which have applique nodes on the shoulder or rim." (Hally and Rudolph 1986:36). The significance of other pottery types in the Averett complex was stressed. "Averett pottery is sometimes found in association with Etowah Complicated Stamped pottery and even resembles Etowah pottery in paste, temper, vessel shape, and vessel size" (Hally and Rudolph 1986:36).

In Schnell and Wright's (1993) overview of the Mississippi Period in the Coastal Plain, the description of Averett pottery concentrated upon vessel form. "The majority of Averett ceramics are plain, expanded rim jars with four shoulder nodes. A minority are small, constricted rim vessels. Both vessel types are subconoidal, with a distinct 'Woodland' appearance, both in paste and firing technology." (Schnell and Wright 1993:29).

The fundamental problem of identifying Averett plain pottery in mixed contexts was described in the analysis of ceramics from excavations at the Carmouche site:

Problems arise when discussing the Averett component at the Carmouche site, because the dominant surface treatment of these vessels is plain. Plain wares are poor chronological markers and may have been produced at almost any time since the Early Woodland period.

The temper size also is not a reliable sorting criterion, since a fine sand was most often recorded for both Middle and Late Woodland pottery types. On the other hand, certain distinctive vessel forms can be used to separate at least some of the plain Middle Woodland ceramics from the later wares. The folded rim bowls, many of which date to the Middle-Late Woodland transition are such an example (Braley 1985:182).

These descriptions and observations illustrate the problems of identifying Averett pottery. For all practical purposes, Averett sherds are difficult to identify except under certain circumstances. Large vessel fragments with rim decoration must be present, or pottery designs similar to Etowah Complicated Stamped or Lake Jackson Decorated must be present in direct association with the otherwise plain pottery. Typical small collections, which would consist primarily of plain body sherds, would be extremely difficult to identify as Averett using most published criteria.

Small "Mississippian" triangular projectile points found on predominantly plain pottery sites represent a valuable diagnostic aid for identifying Terminal Woodland/Early Mississippian sites in the region. Unfortunately, Chase (1959:6) did not accurately interpret that association.

Upatoi Complex Pottery

Chase defined and named a second predominantly plain pottery tradition, the Upatoi complex (Chase 1959b). Chase described two

pottery types, Upatoi Plain and Upatoi Incised (see Figure 113 and following definitions). Upatoi pottery is described as follows:

[Upatoi] pottery was mainly sand tempered, however a large number of grit tempered sherds were found. There appeared to be no special preference in this regard. The vessel type was of two styles. One being a straight-sided conoidal or semi-conoidal base with straight sides and straight rim. The other was of the "salad bowl" variety having slightly incurvate rim.

Practically all pottery is plain with incising being very rare. When incised sherds are found, the motif is always of the rectilinear line either singly or parallel lines often in "zig-zag" patterns or chevron style. Lip treatment of this ware involves rounding, pinching and slight folding. Bevelled rims, usually on the inside, were very common. Pottery interiors are almost always scraped, probably with a flat stick. Characteristic of the exterior of nearly all sherds is the undulating tool marks. Often these appear being intentionally "rippled" or furrowed. Such treatment has been seen only in the vicinity of the rim thus far with the ripple channels being perpendicular to the lip (Chase 1959b:10-11).

Originally, Chase considered the complex to be Early Woodland, but subsequent excavations and the problem of the occurrence of small "Mississippian Triangular" projectile points in direct association with the pottery eventually led to a reconsideration. In his summation of work conducted between 1955 and 1963 that reappraisal is explained:

When the Baird site was explored for the first time in 1958, I thought that we had found a very early pottery period which succeeded the fiber tempered period and that this new complex predated Early Swift Creek and probably Cartersville. Later investigations proved this to be erroneous and tests made on several sites along the Chattahoochee River the autumn of 1961 showed that the Upatoi Complex occurred over Early Swift Creek components which meant that it was later in time. One of the most puzzling elements in the Upatoi artifact complex is the presence of a very small triangular arrowpoint. Such points are usually associated with the Mississippian peoples who came much later (Chase 1964:12-13).

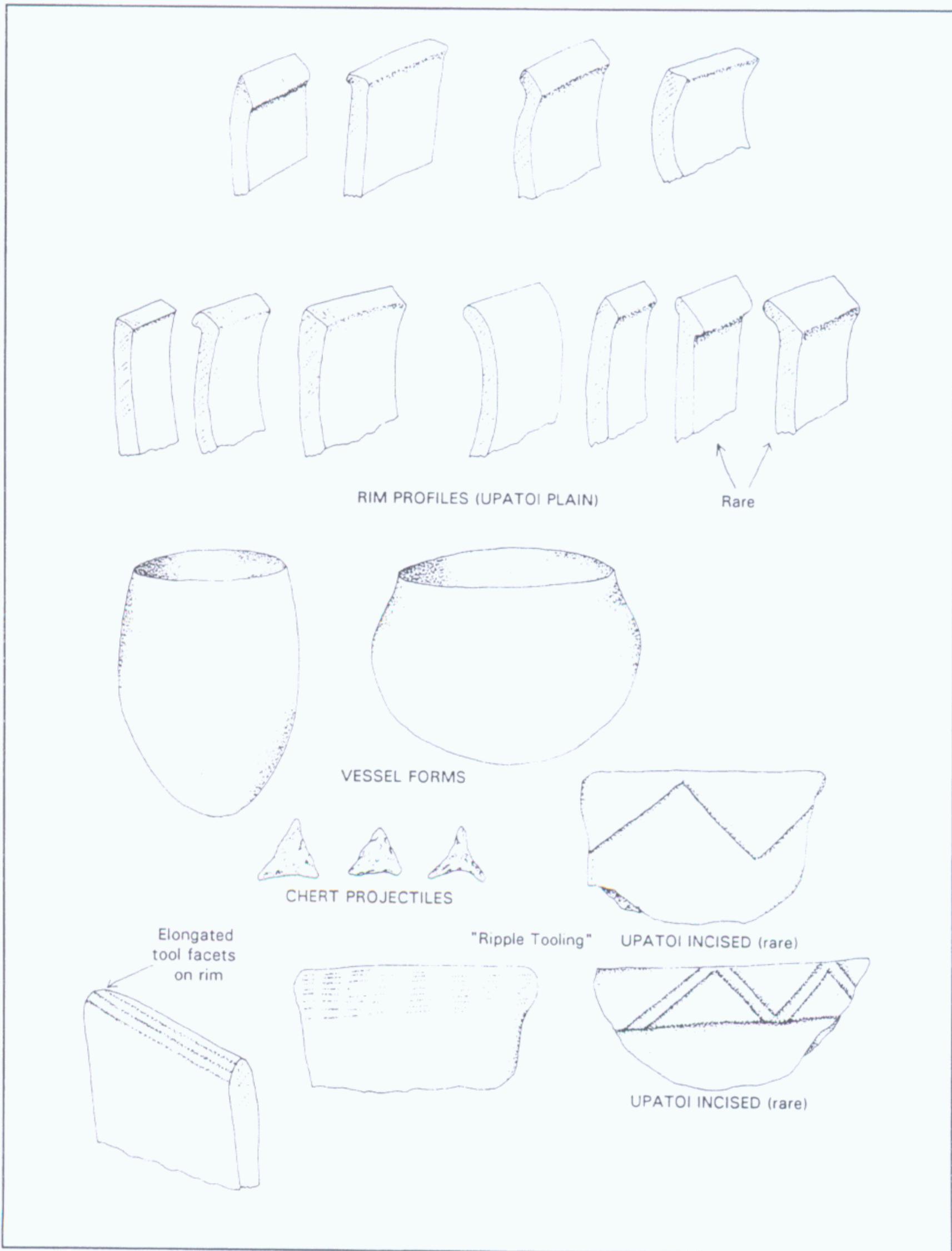


Figure 113. Copy of Chase's original drawings of Upatoi Pottery (Chase 1959b).

Original Type Descriptions of Upatoi Pottery (Chase 1959b)

TYPE NAME Upatoi Plain

Prior Data: None known although this might relate to certain types described by Hurt and others who attempted to synthesize pottery of the Middle Chattahoochee Valley in the past. No published data is known on this type to date.

Ware Characteristics:

- a. **Method of Manufacture:** Coiling
- b. **Temper:** Grit or sand. In grit tempered sherds, the grit grains are not graded well and often large fragments will extrude to the surface. Fiber is rarely seen as a tempering medium but always as a minority element with sand and/or grit. Quartzite sand grains preferred.
- c. **Paste texture and color:** Somewhat lumpy and coarse. Color ranges from buffs and oranges (mostly in sand tempered types) to dark gray shades.
- d. **Surface texture and color:** Usually smoothed but not burnished on inner surface. Smooth and often undulating outer surface as a result of tooling. Pebble burnishing noticeable on some specimens. "Rippling" noted on rim of some specimens. Pebble burnishing on majority of sherds. Multiple bevelling on rounded lips. Inner surface scraping seems common to about 25% sherds.
- e. **Hardness:** 3-3.5
- f. **Thickness:** 4 to 5 mm
- g. **Core:** Unusually darker than surface

Form: 1st form - Large and medium size bowls, slightly incurvate at rim. Lips are rounded or bevelled on inner surface. Some lips have "pinched" or sharp edged aspect. Second Form - includes straight ended vessels, conoidal base (2 flattened bases found in tests)

Geographical Range: Unknown

Chronological position: Based upon finds as 9ME14, it is suspected that this type is very early in Early Woodland times and may follow closely behind Stallings types. Early Deptford probably contemporaneous based upon finds of simple stamped sherds in same level.

Relationships: Suspected remote relationship with Perico Island on the basis of pottery analysis. Except for temper, diagnostic types are practically identical (see Willey 1949:364).

TYPE NAME Upatoi Incised

Prior Data: None known

Ware Characteristics: Same as for Upatoi Plain.

Form: Same as Upatoi Plain (only bowl form is known).

Decoration: Shallow incised groups of parallel diagonal lines enclosed by two parallel incised lines which run parallel to lip. Occasionally only perpendicular or parallel lines to lip are seen.

Comment: Since the discovery of the Upatoi Site (9Me14), isolated finds have been made at the Oliver Dam Site (1Le5) and the Jordan Shelter Cave (9Me8) of both the Upatoi Plain and Upatoi Incised types.

At present, the general consensus seems to be that the Upatoi complex dates to the Late Woodland period (David Chase personal communication 1994; Gresham et al 1985:25; Knight and Mistovich 1984:222). If that assessment is correct, distinguishing Late Woodland Upatoi Complex pottery from Early Mississippian Averett phase pottery is an important problem.

Chase provides no direct comparisons of Averett and Upatoi pottery. In manuscripts subsequent to his two 1959 type descriptions Chase describes the general characteristics of each ware. In his reappraisal of the Averett complex, Chase mentions the presence of numerous Averett sites with ceramics described as "a plain, hard, fine grit tempered pottery whose only embellishment seemed to be small applied 'bumps' on the shoulders of some bowl sherds" (Chase 1963:1).

In a manuscript dated one year later, Upatoi pottery is described as "a plain sand or grit tempered ware, moderately hard with either a globular base or a flat bottom" (Chase 1964:15). It would appear that Chase was able to distinguish plain body sherds by the characteristics listed in his pottery type definitions.

As a part of our analysis, pottery from the Baird site, the Upatoi Complex type site, was reexamined to allow comparison to the pottery from the Victory Drive site. The collections were inspected for decorated sherds and rim sherds of adequate size to determine vessel form and rim diameter. A total of 18 rim sherds of sufficient size for measurement was found (Table 33). The results of that comparison suggest the pottery from the Baird site is similar in many respects to the ceramics identified as Averett on the Victory Drive site.

Table 33. Attributes of Upatoi complex vessels from the Baird site (1995 reexamination).

Vessel Number	Vessel Type	Rim Diameter	Rim Type	Sherd Thickness
1	Open Vessel	32 cm	slightly tapered	6 cm
2	Constricted Rim Vessel	40 cm	rounded	5 cm
3	Constricted Rim Vessel	34 cm	rounded	7 cm
4	Open Vessel	34 cm	slightly tapered	6-7 cm
5	Constricted Rim Vessel	24 cm	flattened/punctate	7 cm
6	Open Vessel	28 cm	sloppy fold	7 cm
7	Open Vessel	38 cm	tapered/flat	5 cm
8	Constricted Rim Vessel	34 cm	sloppy interior fold	6 cm
9	Constricted Rim Vessel	28 cm	tapered	6 cm
10	Constricted Rim Vessel	34 cm	flat	7 cm
11	Constricted Rim Vessel	38 cm	rounded	6-8 cm
12	Open Vessel	22 cm	flat	7 cm
13	Constricted Rim Vessel	32 cm	tapered	6 cm
14	Constricted Rim Vessel	34 cm	flattened	6 cm
15	Constricted Rim Vessel	38 cm	flattened	7 cm
16	Constricted Rim Vessel	34 cm	flattened/brushed	7 cm
17	Constricted Rim Vessel	30 cm	tapered	7 cm
18	Constricted Rim Vessel	34 cm	flattened	5 cm

Material from Chase's Baird site excavations, presently curated at the University of Georgia in Athens, includes several hundred predominantly plain sherds and equal amounts of lithic material. Diagnostic artifacts indicate several components. The collections contain Late Archaic projectile points and fiber tempered pottery; Middle Woodland projectile points, check stamped and simple stamped pottery; and Mississippian ceramics. The lithic material relates to several occupations.

The Upatoi Complex sherds from the site are distinguishable from sherds of Woodland and Mississippian components. The Upatoi Plain sherds were generally thicker than

other sherds and differed in temper characteristics. The Upatoi sherds were tempered with medium-sized sand grains which often gave the sherds a gritty feel.

Only five decorated Upatoi sherds could be found in the large collection of pottery. Included were two brushed sherds, two sherds with single incised lines and one sherd that appeared to contain a small number of punctations (Figure 114). Upatoi rim sherds showed a restricted range of vessel forms. The profiles of the largest rim fragments suggested bowls or wide orifice pots. Some are clearly open while others are slightly constricted at the orifice (Figure 115).

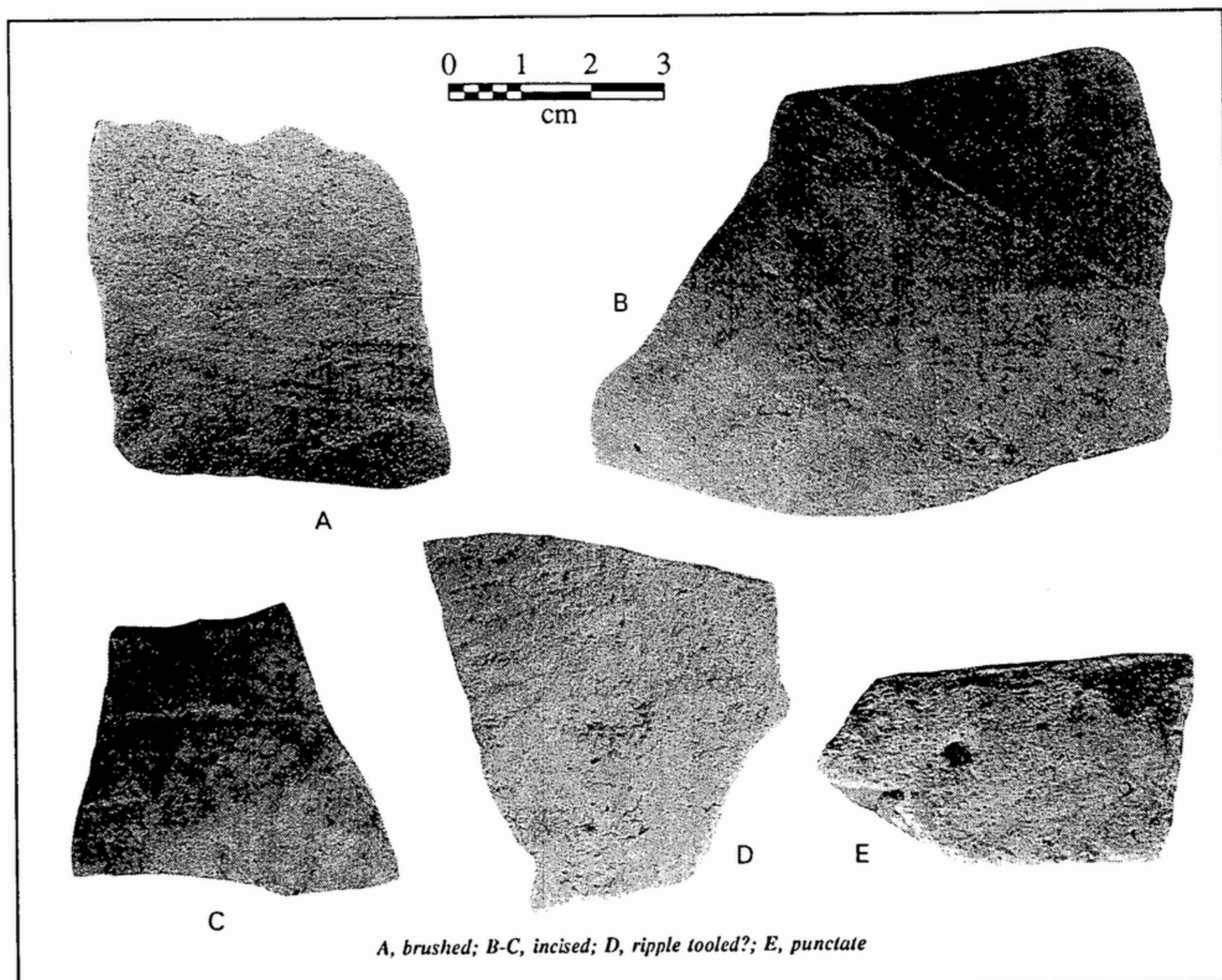


Figure 114. Photographs of Upatoi sherds from the Baird site.

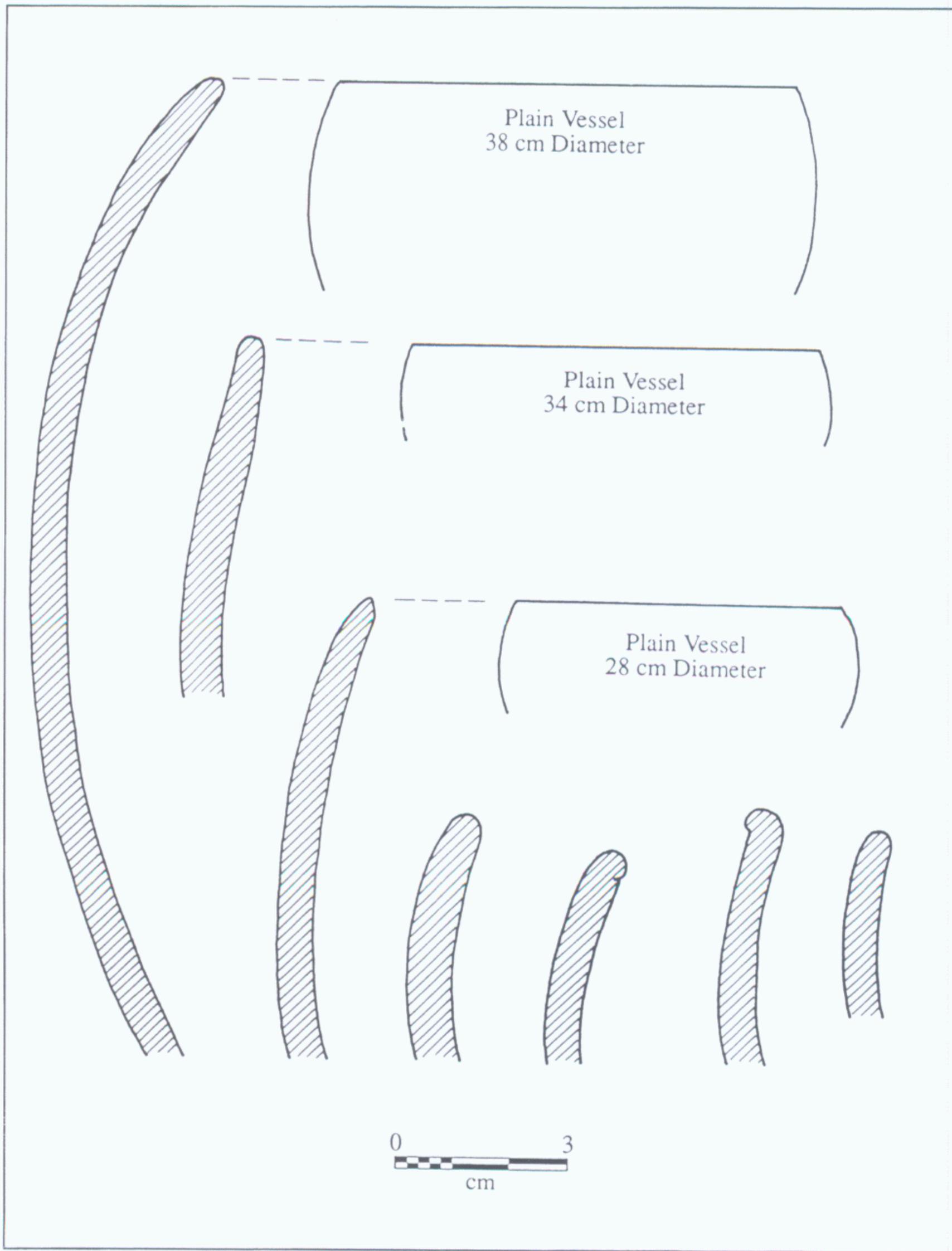


Figure 115. Profile drawings of Upatoi vessels from the Baird site.

In terms of vessel form, temper type, texture and rim form, there are strong similarities between the Baird site and Victory Drive site pottery. These similarities will be examined further.

Woolfolk Series (X-Plain)

Chase described the third pottery type following excavations at the Walker Street site, 9Me60, a site located a few kilometers south of the Victory Drive site. A formal type description was prepared but there is no indication that the pottery type was ever applied to any other site (Chase and Huscher n.d.; Chase et al. 1994). The type description follows with text excerpts from those manuscripts.

X-Plain. The occurrence of a considerable showing of this plain, and a very few incised, ware posed the probable existence of a heretofore undefined pottery in this area. It would probably be less unwieldy to name it at the outset with some appropriate designation such as "Woolfolk Plain", or "Woolfolk Incised." I was hesitant to do this in the face of its possible (although unlikely) identity as an Averett variant since it does, in some ways, resemble Averett Plain (Chase 1959).

Since sixty two percent of the sherds in this class occurred in the 7.5-8.5 level and the remainder found not lower than 9.0 [upper levels of site], its association with the Cartersville component seems very unlikely. Only 7 sherds found in this category were incised and 75 were plain.

Original Type Descriptions of Woolfolk or X-Plain Pottery (Chase et al 1994)

TYPE NAME X-Plain

Ware Characteristics:

- | | |
|------------------|---|
| a. Temper: | Finely graded grit |
| b. Color: | Brownish-black to buff or dirty-orange |
| c. Surface: | Outer surface smoothed, one specimen looked brushed or scraped. Tooling marks occur more commonly in the inner surface. Stray clay lumps occur on the outer surface but this is infrequent. |
| d. Lip: | Rounded with slight outward fold--similar to those of Middle Swift Creek but not quite as pronounced a fold. Rim lugs may pertain to this type. |
| e. Body Form: | Not known, however, one large restorable vessel section indicated a globular body with somewhat straight sides. |
| f. Thickness: | Slight thickening at base but otherwise fairly uniform, about 1/8". |
| g. Relationship: | Not known. Plain body sherds bear resemblances to some Averett types. Lip is atypical of Averett, however. |

TYPE NAME X-Plain Decorated

Description: Bear thin line incising in rectilinear pattern similar to Averett Incised. Long parallel lines, evenly spaced, intersecting at either right angles or 30 to 45 degree angles. Rim area only decorated.

This ware showed up for the first time while going over the specimens recovered in X-1. At first, I thought it was some sort of Averett (still might be a prototype). But two things tend to knock that out - increase in incidence as we go deeper, and small rim folds - a Swift Creek trait. Curiously, this stuff has not shown up in the material gathered from the talus in the ditch nor did we find any last August in the wall cut. Some sherds were found in the ditch which were classified as Averett based upon surface appearance, but these might relate to Plain "X" ware.

I compared Class X pottery with typical Averett sherds and found that in terms of surface texture and temper as well as color - they are very much alike. The "X" ware is a bit rougher and tooling marks are slightly different in the few specimens found thus far. The big shock was the little rim fold - this is found in Middle through much of Late Swift Creek. We did find some on the Averett Upper terrace (9ME26) but never named it as a separate type. I have long suspected that Averett had some sort of local Woodland ancestor which might have evolved in Swift Creek times but never had the proof. Also looks like Cat Cave Creek Plain (Chase et al. 1994:25-26).

Examples of Chase's unidentified or "Woolfolk Incised" pottery are illustrated in Figure 116. These sherds are of interest because of the similarity of design to one vessel found in dated Averett context at the Victory Drive site. Chase's comments on a possible local ancestor to Averett are important. It is quite probable that Upatoi, Woolfolk, and Averett pottery represent a local continuum or pottery tradition. There is also some probability that portions of these pottery complexes overlap.

The Victory Drive Collections

The Victory Drive site did not produce large collections of Averett pottery. The importance of the site is that pottery was recovered from well-dated contexts. A characterization of the Victory Drive site pottery, which we will refer to as Averett Plain and Averett Incised, follows. Selected sherds are shown in Figures 117 and 118 and described in Table 34.

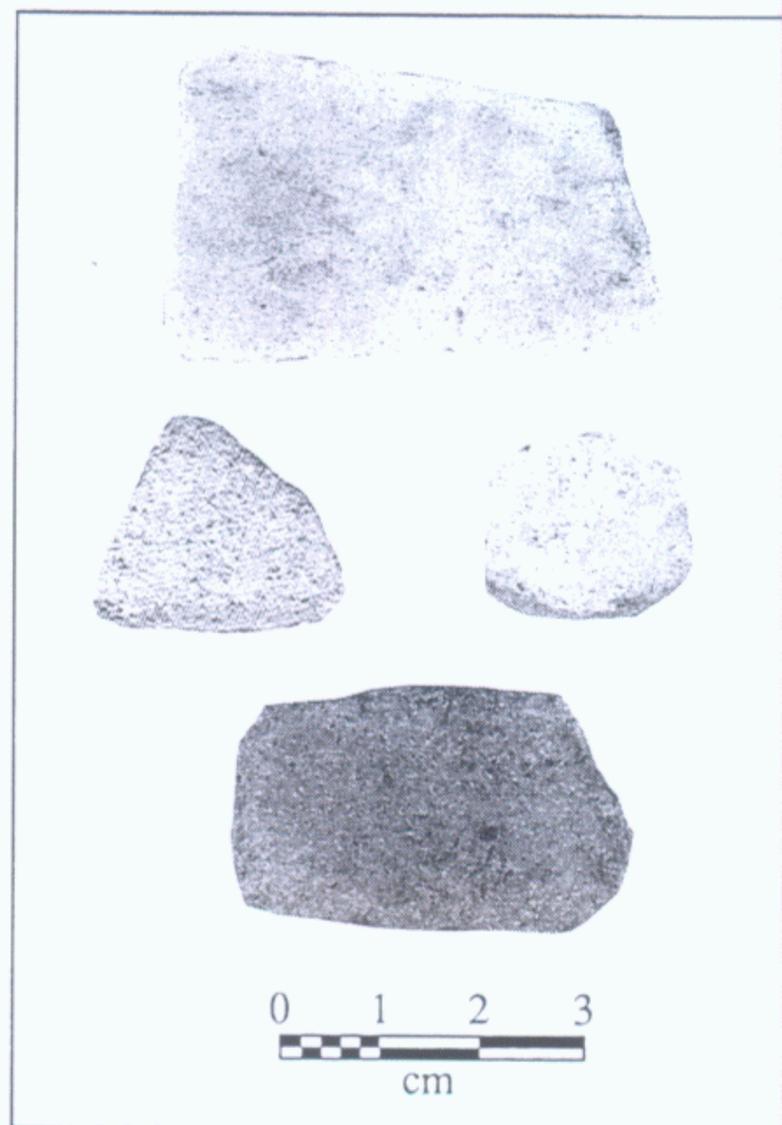
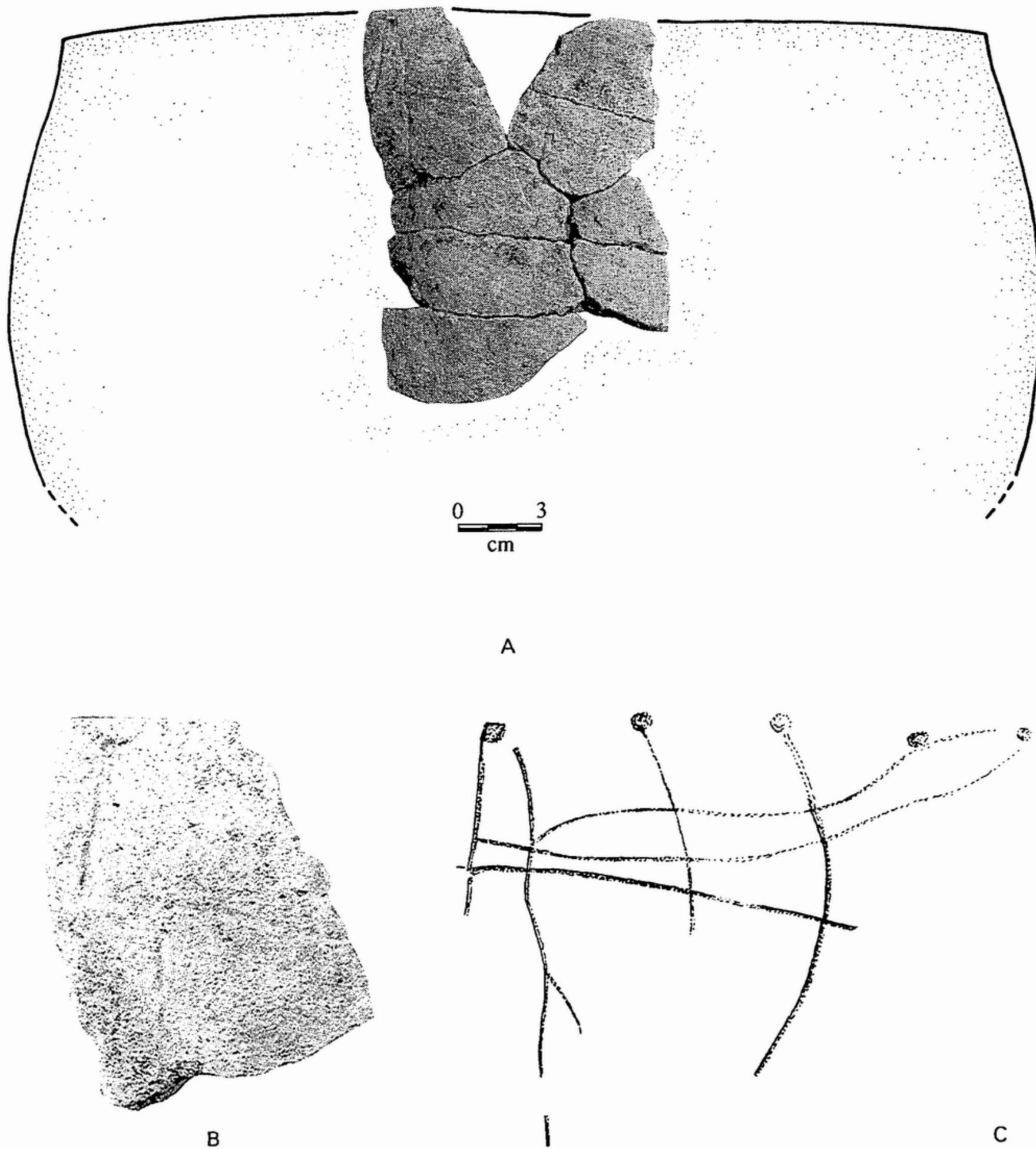


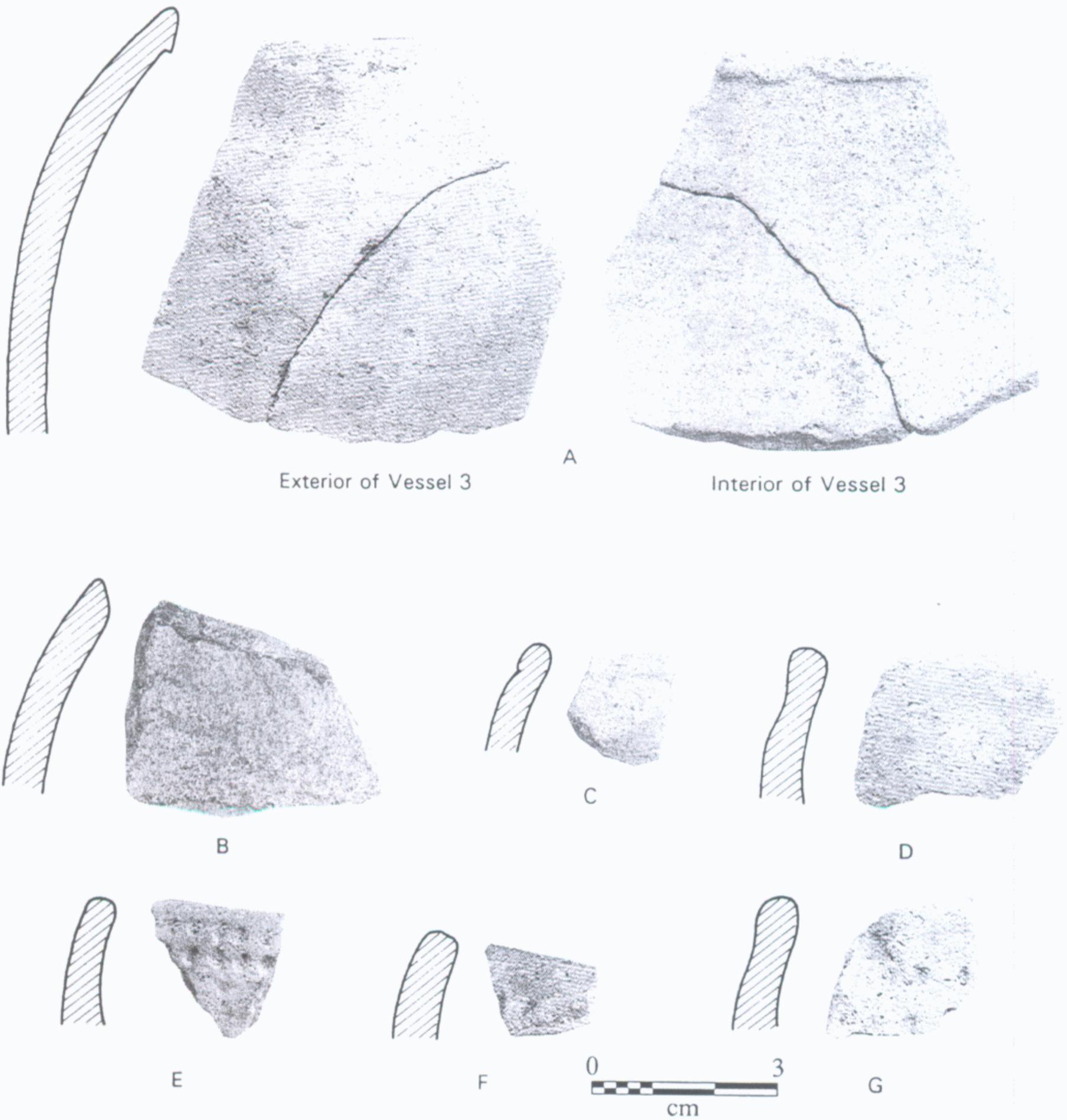
Figure 116. Examples of "Woolfolk or X-Plain" pottery from Excavation Unit 1 at the Walker Street site.

The pottery identified as Averett Plain at Victory Drive was distinguished from the sherds of other components by a relatively fine temper of sand or grit generally less than 0.5 mm in size. Interior and exterior surfaces were lightly colored and generally exhibited a gritty "feel" or texture. There were few instances of smoothed or rubbed surfaces and no instances of burnishing, which was so common on sherds of later components. Sherd thickness generally ranged from 7 to 8 mm with lips being slightly thinner. The thickest sherds were fragments of vessel bottoms which expanded to as much as 12 mm. These measurements are greater than Chase's descriptions for either Averett or Upatoi, however our reexamination of those collections showed sherd thickness to generally be 1 to 2 mm greater than expressed in his type descriptions.



A, reconstructed profile; B, enlarged view of upper left sherd showing punctation and incising; C, tracing of design

Figure 117. Illustrations of incised and punctate Averett Vessel 5 from Feature 5 at the Victory Drive site.



A-D, plain vessels: A, Vessel 3 (Feature 3); B, Vessel 1 (TP2 Level 2); C, Vessel 2 (TP2 Level 2);
D, Vessel 4 (Feature 3); E-G, punctate sherds, Vessels 12, 13, 14 (Test Pit 3 Level 2)

Figure 118. Averett and possible Averett-related vessel rim sherds from the Victory Drive site.

Table 34. Attributes of Averett and Possible Averett Vessels from Victory Drive.

Vessel Number	Provenience	Vessel Type	Rim Diameter	Description (Rim type, sherd thickness, temper)
1	Test Pit 2 Level 2	Incurvate Bowl	22 cm	Flattened rim (6 mm thick) body 7mm thick. Temper: medium sand and grit (0.2-0.5 & 1.5-2.0 mm) gritty interior; smooth exterior.
2	Test Pit 2 Level 2	Incurvate Bowl	est. 24 cm	Flat rim with narrow fold (3 mm), rim 6 mm, body 7 mm. Temper: medium sand/fine grit (0.2-0.5 mm)
3	Test Pit 3 Feature 3	Incurvate Bowl	24 cm	Flat rim (interior fold 4 mm wide), 7 mm thick. Temper: grit (0.2-1.0 mm) gritty interior and exterior.
4	Test Pit 3 Feature 3	Incurvate Bowl	40 cm	Flat Rim, rim 6 mm thick, body 7 mm thick. Temper: grit (0.2-1.0 mm), gritty interior and exterior.
6	Trench 240N	Possible Jar	26 cm	Flattened rim (5.5 mm thick), weak fold (4 mm), body 7 mm. Temper: grit (0.2-1.0 mm), gritty surfaces.
7	Block A Grab Sample	Incurvate Bowl	24 cm	Flattened rim (5.5 mm thick), body 7 mm thick. Temper: grit (0.2-1.0 mm), gritty surfaces.
8	Block A Feature 68	Incurvate Bowl	34 cm	Flattened rim (7 mm thick), body 7.5 mm thick. Temper: grit (0.2-1.0 mm), gritty surfaces.
9	Test Pit 4 Level 1	Incurvate Bowl	est. 32 cm	Flattened rim (6 mm thick), body 7 mm thick. Temper: grit (0.2-1.0 mm) gritty surfaces.
10	Test Pit 4 Level 1	Incurvate Bowl	est. 40 cm	Flattened rim (6 mm thick), body 7 mm thick. Temper: sand/grit (0.2-0.5 mm) gritty surfaces.
11	Test Pit 10 Level 2	Incurvate Bowl	est. 30 cm	Flattened rim (6 mm thick), body 8 mm thick. Temper: sand/grit (0.2-0.5 mm) gritty surfaces.
Punctated Rim Vessels				
5	Feature 5	Incurvate Bowl	34 cm	Slightly flattened rim (5 mm thick), body 7 mm thick. Temper: grit (0.2-1.0 mm), gritty surfaces (smoother exterior). Punctations (0.5-0.9 mm below lips), incising extends to 7 cm.
12	Test Pit 3 Level 2	Incurvate Bowl	est. 22 cm	Flattened rim (6 mm thick), body 7 mm thick. Temper: sand < 0.5 mm, sandy surfaces. 2 rows of punctations (2.5 mm) below rim.
13	Test Pit 3 Level 2	Incurvate Bowl	est. 32 cm	Flattened rim (5 mm thick), body 8 mm thick. Temper: grit (0.2-0.5 mm), gritty surfaces. Row of punctations 9 mm below lip.
14	Test Pit 3 Level 2	Incurvate Bowl	No Diameter	Flattened rim (7 mm thick), body 8 mm thick. Temper: sandy (0.2-0.4 mm), gritty surfaces. Two rows of punctations, 1-2 cm below lip.

Because most of the Victory Drive collections were taken from mixed plowzone deposits, an accurate count of Averett Plain sherds is not possible. Many sherds, especially smaller pieces, were typed simply as plain sand tempered or plain grit tempered. The count for sherds actually typed as Averett Plain is slightly less than 750. The total count of sherds typed as Averett decorated is only 19. The count for decorated sherds includes nine incised, six punctate, and four brushed. Of this total, three-quarters of the incised sherds go to a single vessel found in Feature 5. The punctate category includes three punctate rim sherds, which may date to a slightly earlier occupation. The brushed sherds are somewhat problematic because they could be confused with Chattahoochee Brushed sherds of atypical tempering. In any event, the Victory Drive site produced a predominantly plain sherd collection with decorated sherds accounting for a maximum of 2.5 percent of the pottery. If untyped plain sherds are included, the percentage of decorated sherds would be well under two percent.

In the small collection of rim sherds from Victory Drive, vessel lips ranged from flattened, to slightly rounded, to beveled, which covers the range for both Averett and Upatoi types (Chase 1959a, 1959b). As shown in the preceding figures and table, vessel form is predominantly that of a simple bowl. Possibly, some of these rims represent conoidal jar forms, but the flaring rim jar typical of Averett phase sites appears to be missing from Victory Drive. In this respect there are again similarities to the collection from the Baird site.

The types of vessels found at the Victory Drive site may also reflect the type of site and the intensity of occupation. We may assume from the lack of substantial structures and large pit features that the early Mississippian occupation was not intensive. In fact, it is quite probable that the Averett occupation represents a series of occupations by small

groups of people over an extended time period. This type of occupation would be reflected in a pottery assemblage that would have a limited range of vessel forms and vessel sizes.

Within the combined areas of the Victory Drive and Bull Creek site there are measurable differences in the pottery assemblages of the Early Mississippian, Late Mississippian and historic Creek occupations. The latter two represent village level occupations and display a wide variety of vessel types and sizes. A comparison may also be made with Averett sites which have been previously identified as having greater intensities of occupations.

Two sites are easily comparable to Victory Drive. The Carmouche site, 9Me21, produced substantial pottery collections, pit features of moderate size, and evidence of insubstantial shelters (Gresham et al 1985). The Florence Marina site, 9SW124, produced larger collections, large pit features, and better evidence of more substantial structures (Ledbetter and Braley 1989).

Both Carmouche and Florence Marina produced similar types of vessel forms. Because of the small size of the Victory Drive sample, comparisons of varieties of vessel types have little meaning. At the most simple level, the ratios of jars to bowls can be compared. At Victory Drive, only one possible jar was identified from a collection of 14 possible vessels. At Carmouche, two bowls were found for each jar (Braley 1985:188). A similar ratio was found at Florence (Ledbetter and Braley 1989:128). A second comparison may be made by comparing the size distribution of bowls at the three sites. This comparison is shown in Figure 119. The small collection from Victory Drive appears to show three small clusters of vessel sizes. Carmouche shows a very broad range of sizes with most vessels in the lower half of the size range. The Florence vessels show a broad range but cluster in the higher size range.

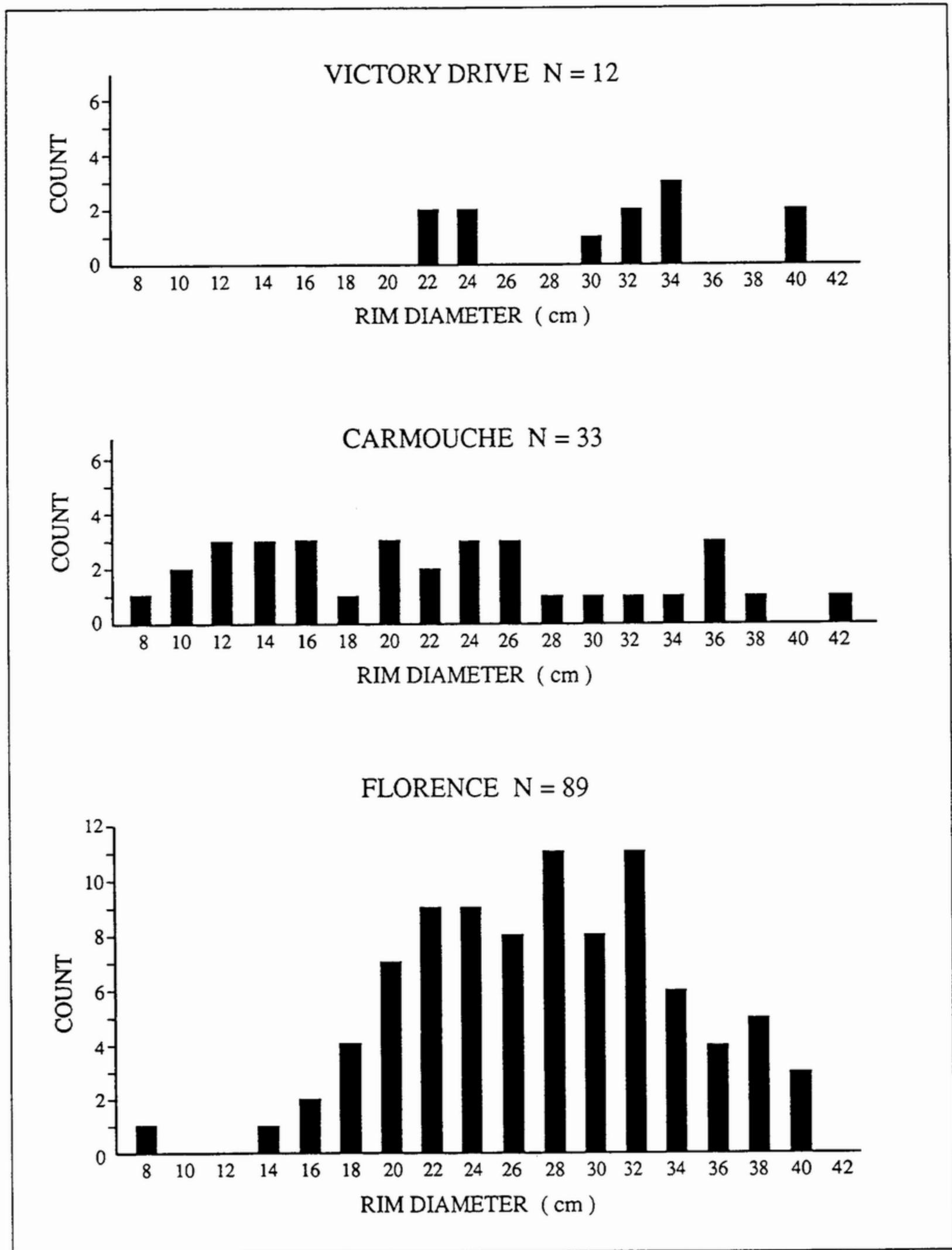


Figure 119. Comparison of vessel sizes for bowls from three Averett sites.

Vessel size is often used to infer the types of tasks performed at a site and group size on Mississippian sites (Hally 1982; Braley 1985; Ledbetter and Braley 1989). Medium sized jars, which would include the one possible example from Victory Drive and most of the jars from Carmouche and Florence Marina might have been used for food preparation, while large jars might have been used for food storage. In terms of bowls, Braley (1985:188) suggested that at Carmouche, medium sized bowls in the 14-30 cm range would have been used for individual consumption while larger bowls were used for communal consumption. The medium size bowl range would account for most of the bowls at Carmouche and Florence Marina but less than half of the bowls at the Victory Drive site. This may indicate other uses for a portion of the bowls at the site.

Returning to the question of whether the Victory Drive site should be called Averett or some other complex, there is something of a dilemma to contend with. Radiocarbon dates confirm an Averett phase period of occupation but the ceramics are not typical of "classic" Averett as defined by Chase. The pottery contains decorative techniques, chiefly punctate designs, that are not described by Chase as typical of Averett. The one vessel illustrated from Feature 5 appears to have no counterpart. Vessel forms are more similar to Upatoi complex forms than Averett. This is primarily because flaring rim jars are lacking. While this absence may be a reflection of site type, the similarities between the Victory Drive collections and the Upatoi type site collections require further study into the proposition that Upatoi actually predates Averett. It is entirely possible that a substantial diversity exists in the pottery of individual sites during the Terminal Woodland/Early Mississippian interval and the definition of Averett pottery should be expanded to include more diverse decorative styles. Possibly, the pottery recovered from the Victory Drive site simply reflects that diversity.

Late Mississippian Pottery: Bull Creek Phase Ceramics

During the late Mississippian period, the Victory Drive and Bull Creek sites would have been positioned at the boundary of two ceramic traditions. The sites lay at the western boundary of a region with a ceramic tradition characterized by Lamar Complicated Stamped pottery. They also lay at the northern edge of a Gulf Coast, Late Fort Walton tradition characterized by pottery decorated with incised and punctate designs.

Basically, Bull Creek phase pottery is typical of late Mississippian decorative styles and vessel forms found throughout the southeast. However, the ceramic characteristics produced by a blending of ceramic traditions resulted in decorative motifs in the Bull Creek phase ceramic assemblage that sets it apart from other phases. The Bull Creek site is the type site for the Bull Creek phase but relatively little had been published describing the pottery found there prior to the work accomplished through the Riverwalk Project. The problem was noted three decades ago: "The site has over the years become a favorite example of a certain variant of Lamar. Despite this repeated use as an example, nothing has been published on the site in the way of a comprehensive study of the site and its implication in southeastern archeology" (Schnell 1963).

Through the years, the analysis of ceramics from sites such as Rood's Landing (Caldwell 1955), 9Cy51 (Broyles 1962), and Park Mound (Hally and Oertel 1977), have been interpreted as typical of the Bull Creek phase but actual contemporaneity of these sites and the Bull Creek type site was unknown. Lacking data from the type site, archeologists have continued to quantify similar ceramic assemblages (Knight 1994; Schnell 1986, 1990; Schnell and Wright 1993; Scarry 1985) and define the geographical distributions of sites of the phase (Hally 1994; Schnell and Wright 1993).

The work of many researchers has helped refine our understanding of Bull Creek phase ceramic types and ceramic relationships. As a result of work supported by funds from the Riverwalk Project, detailed ceramic studies have now been conducted on the pottery from the Bull Creek site. That study resulted in the quantification and description of specific ceramic attributes of the Bull Creek site pottery assemblage (Ledbetter 1995c).

The blending of ceramic traits from two areas created a basic set of characteristics that defines the Bull Creek phase pottery assemblage. The basic traits of this blending have been described by several researchers but perhaps most concisely as follows:

Bull Creek phase ceramics can be considered a blend of generic Lamar and generic Fort Walton of this period [late Mississippian]. The zone punctated type Fort Walton Incised becomes the principal Gulf Tradition decorated type, while Lamar Complicated Stamped becomes common as the principal "South Appalachian Mississippian" type added to the local assemblage (Knight and Mistovich 1984:224).

A.R. Kelly characterized the pottery in 1951 in the following manner:

... while the rim treatment, paste, and general morphology of the bulk of the stuff at Bull Creek is definitely in the time level and "feel" of Lamar, the specific designs have a Savannah stamped tradition; also there is a lot of pottery that must refer to influences coming up the Chattahoochee from Florida, Fort Walton influences. This means a very interesting variant in Bull Creek of the widespread Lamar manifestation (Ledbetter 1995b:49).

A few years later Joseph Caldwell made very similar observations concerning a related ceramic assemblage at Rood's Landing. While the Rood's occupation may date to a few decades later than the primary occupation at Bull Creek, Caldwell's observations are important for interpreting pottery of the general time period.

[The Rood's material] shows ceramic similarities to Ft. Walton of northwest Florida, to the Lamar Culture of Central Georgia, and to a lesser extent Safety Harbor of the Florida east Coast. There are even some specific ceramic similarities to Moundville, Alabama, and the Dallas Culture which succeeded Hiwassee Island in eastern Tennessee. The type of notched rim strip, for instance, is found both at Moundville and in Dallas associated with effigy rim adornos.

The Later Period Culture [Bull Creek related] at Rood's Landing is neither Ft. Walton nor is it Lamar, but represents rather a borderland culture between the two, apparently more closely oriented toward Ft. Walton. The variant of Lamar Complicated Stamped found at Rood's is particularly interesting in appearing to be directly derived from the older Savannah Complicated Stamped type (Figure 120). Lamar Bold Incised, as the type is known in central Georgia, is practically absent, and its place is taken by Rood's Incised which more closely resembles Floridian variants of a Ft. Walton time level (Point Washington Incised and Pensacola Incised) . . . (Caldwell 1955:45).

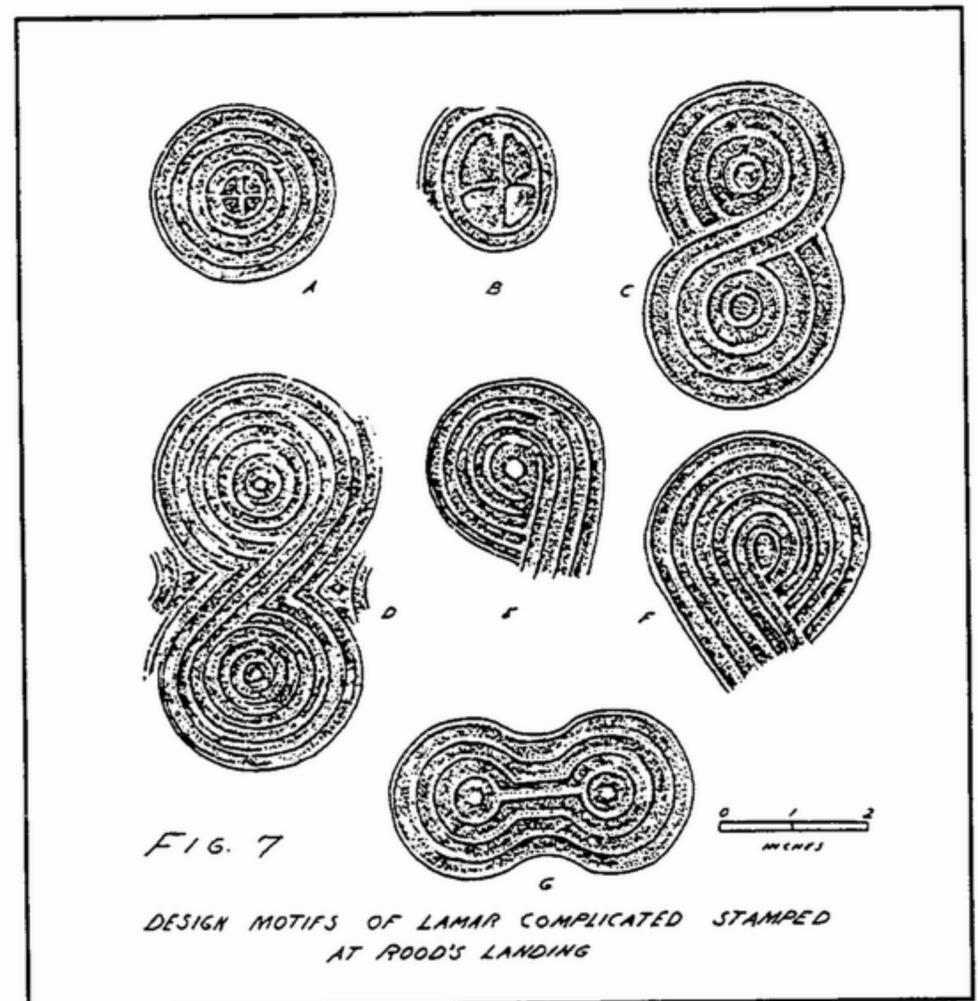


Figure 120. Illustrations of Lamar Complicated Stamped Design motifs from Rood's Landing (redrawn from Caldwell 1955: Figure 7).

The first presentation of Bull Creek pottery data to the archeological community is credited to Isabel Patterson even as the WPA excavations progressed (Patterson 1936). Patterson's paper, presented to the Society for American Archaeology in Washington, highlighted the more spectacular burial finds, but the results of preliminary analysis of more than two thousand sherds were summarized.

A preliminary analysis of 2,240 sherds from the Bull Creek site shows a surprising resemblance with the 5,000 sherds studied and tabulated from the Lamar Village site on the Ocmulgee. There are no major differences in the field of design or stylistic treatment. In the Bull Creek collection there are a few sherds, a fraction of one percent which are probably related to the Lower Mississippi types exhibited by James A. Ford in his work in this area. A few similar incised and punctate types found at Lamar may be ascribed to the same influence. These two sites, so far removed on different river systems, show such a striking similarity at a time [far removed] considered to be either early protohistoric, just antedating de Soto, or late prehistoric. Forty-nine percent of the Bull Creek sherds are of stamped ware, forty percent plain, two percent incised and one percent incised and punctate. All other designs are less than one percent and ninety percent of the pottery is grit-tempered (Patterson 1936).

David Chase produced the following description of the pottery following testing at the Bull Creek site in the mid-1950s.

The predominant pottery type found during the recent tests is, without doubt, Lamar Complicated Stamped. This is a thick, gray to black ware, heavily grit tempered with particles of the tempering medium extruding to the surface. In almost every rim of this type, the noded collar is present. Nodes are either applique or else pinched. A minority of sherds lack this collar. Stamping is poorly controlled and random over stamping with poorly cut blocks or paddles seems to be the rule. The vessel is globular and the stamping is applied over all. The rim is usually everted and the lip squared or rounded. No handles appear with this type. Lamar Plain is either a variant of the Lamar Complicated Stamped but without the stamping, or else appears in the form of small bowls. The lips are occasionally notched. The temper is sometimes grit and in a few instances sand is used.

The grit tempered pots do not always show the grit on the surface. The noded collar sometimes appears on this ware and when it does the rim is everted. Other rims indicate straight sided or inverted bowl rims. A third type is Lamar Bold Incised. Rather deep incised, usually curvate lines, appear in the region of the rim. Sometimes these consist of only two or three parallel lines circumscribing the vessel. Interlocking loops also appear on some pots. In the cassuela bowl, which is making its first appearance in Middle Lamar times, the incising is applied to the inner ledge lip. Notched rims often appear with the Lamar Bold Incised vessels. Rim adornos, usually lugs, nodes and more rarely effigies, usually of birds occur on this type of ware. Included in the Lamar Bold Incised is a variant of the Fort Walton Punctate. In actuality, most sherds decorated in this manner cannot be distinguished from the classical Fort Walton punctate type. Another Fort Walton type, acquired by trade perhaps, is the Lake Jackson Plain. This occurs as a minority ware at Bull Creek. Shell tempering is also a minority manifestation . . . A very few sherds found were of the burnished black slip variety. This is another ware which became common in later times. These were often incised, never stamped and never with handles. Adornos in this ware are often seen - usually as animal or bird effigies. An acquaintance with the Dallas Focus is suspected here (Chase 1957).

A detailed analysis of ceramics recovered from the Bull Creek site during excavations conducted by A.R. Kelly in 1950 and Frank Schnell, Jr., in 1959, was initiated by Schnell in the early 1960s. Records of that analysis have been maintained at the Columbus Museum and are reported, in part, in a draft manuscript (Schnell 1963). The analysis completed by Schnell is significant and constitutes a substantial part of the site's ceramic data base.

Additional detailed information on ceramics relating to the Bull Creek site is found in reports for site 9Cy51 (Broyles 1962) and Park Mound, 9Tp41 (Hally and Oertel 1977). Both reports contain thoroughly described, tabulated and illustrated accounts of ceramic collections which generally conform to the pottery found at the Victory Drive and Bull Creek sites.

Work conducted by Schnell over the past decade has resulted in splitting of the traditionally defined Bull Creek phase into early and late phases. Schnell has suggested that the ceramic assemblages from 9Cy51 and Park Mound date later in time than the Bull Creek type site (Schnell 1986, 1990). Schnell considers the Bull Creek site (9Me1) and the contemporary occupation at Kolomoki (9Er1) the primary examples of the earlier Bull Creek phase. As it now stands, the Bull Creek phase should date predominantly to the fifteenth century, while 9Cy51 and Park Mound, and the contemporary occupation at Rood's Landing (9Sw1) date to the predominantly sixteenth century Stewart phase (Schnell 1990:67; Schnell and Wright 1993:21).

Schnell's two phases are distinguished by differences in relative proportions of complicated stamping compared to plain, incised and punctate pottery. Bull Creek phase assemblages contain complicated stamped pottery in excess of fifty percent and low counts of incised/punctate wares. By contrast, Stewart phase collections contain more plain wares (>50%), with complicated stamping dropping to about twenty percent and incised/punctate counts increasing to as much as fifteen percent of the total pottery. Minor amounts of check stamping occur in collections of both phases (Schnell 1990:67-68). Figure 121 shows a graph originally prepared by Schnell (1985) which portrays these distinctions.

VARIATION IN LAMAR POTTERY ASSEMBLAGES
IN CHATTAHOOCHEE VALLEY SITES

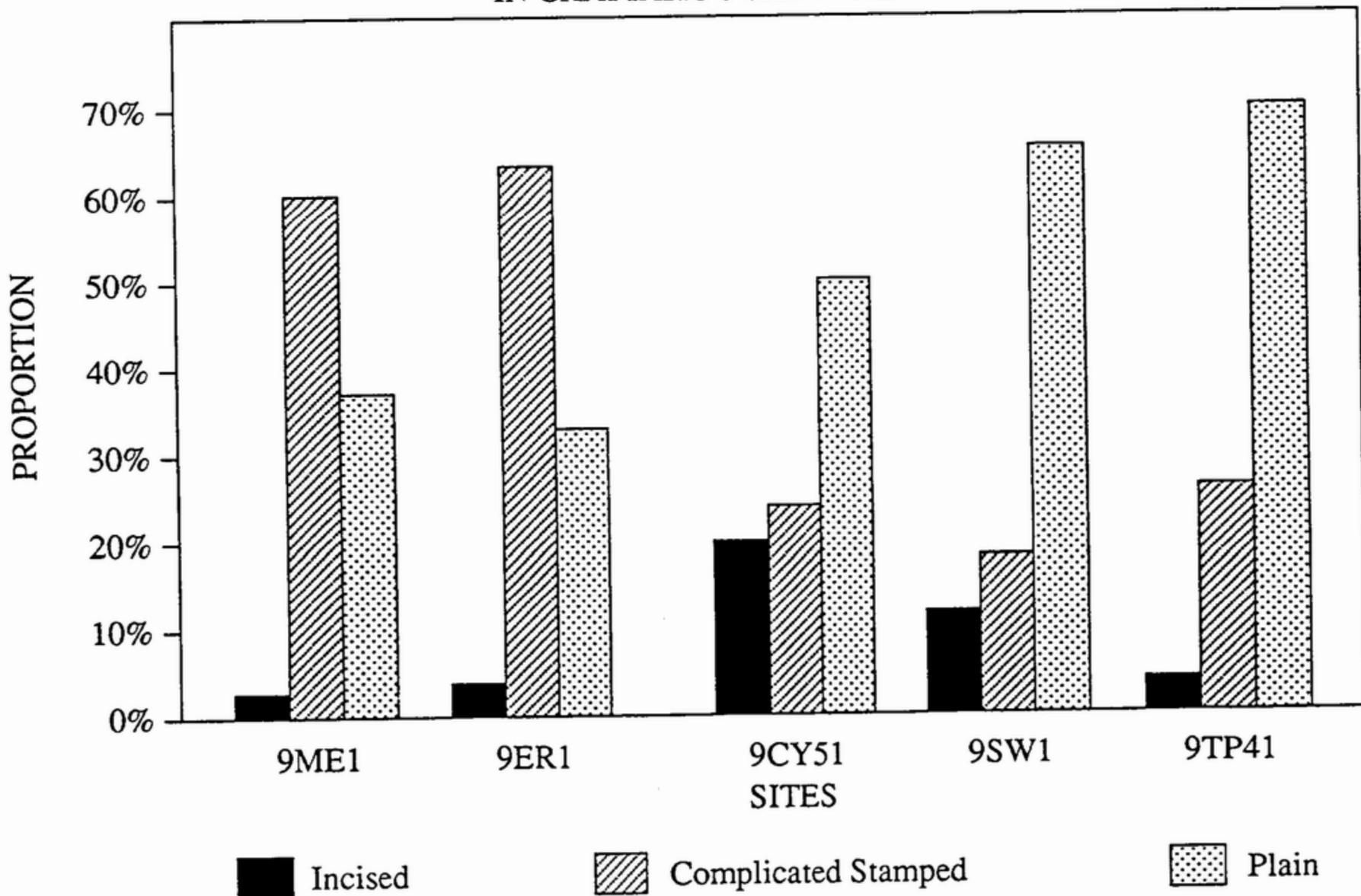


Figure 121. Graph comparing pottery counts used to distinguish Bull Creek phase (9Me1, 9Er1) and Stewart phase components (9Cy51, 9Sw1, 9Tp41), adapted from Schnell (1985).

Stewart phase collections are further distinguished by the addition of certain incised motifs similar to Pinellas Incised and the incised pottery of the Avery and Atasi phases to the north and northwest (Knight and Mistovich 1984:224). This would include the type Rood's incised (Caldwell 1955:27). Figure 122 illustrates an example from site 9Cy51 (Broyles 1962). The design shown on the vessel from 9Cy51 is perhaps the most common Pinellas-like motif attributed to occupations of this latter phase (Hally 1994:154). During the SAS examination of collections from the Bull Creek site, only one vessel with this motif was identified (Ledbetter 1995c:183).

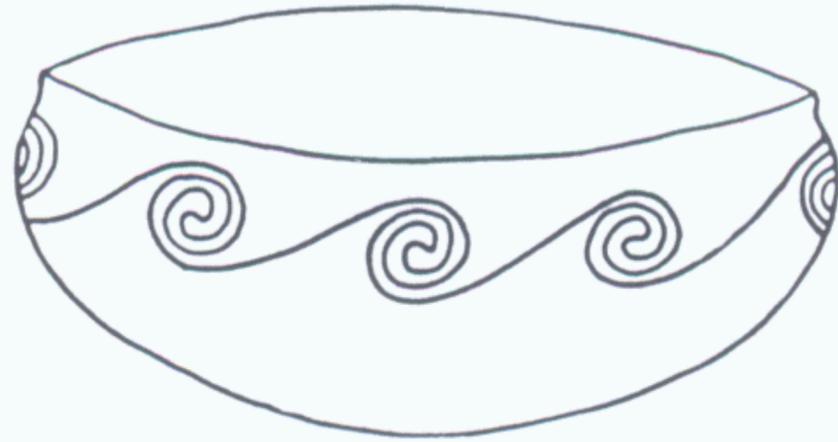


Figure 122. Drawing of typical Stewart phase incised motif (redrawn from Broyles 1962: plate 7).

While the addition of Gulf Coast tradition design motifs to a Lamar ceramic assemblage of the Bull Creek and Stewart phases has been recognized for half a century, few attempts have been made to study those motifs. In the mid-1980s, John Scarry devised a classification scheme for Fort Walton ceramics which encompasses the geographic region containing the Bull Creek phase (Table 35). Scarry's (1985) type/variety system builds upon the earlier Fort Walton typology (Willey 1949) and provides an extremely important tool for interpreting differences in ceramic assemblages within a tight temporal and regional framework. Examples of Scarry's pottery types that relate to the Bull Creek phase are shown in Figure 123.

In order to characterize the Bull Creek phase ceramic assemblage, a number of attributes were examined and tabulated in reporting the Bull Creek site (Ledbetter 1995c). This required the integration of several sources of data, such as pottery tabulations from WPA excavations preserved in the National Park Service files, the files of Frank Schnell, Jr., curated at the Columbus Museum, and a reexamination of the surviving collections from the Columbus Museum and University of Georgia.

While there was no formal report detailing the laboratory analysis conducted following the 1936-1937 excavations at Bull Creek, a substantial body of data was recorded and tabulated and much of that paperwork has survived. At the regional WPA laboratory in Macon, detailed attribute analysis was conducted using the McKern System, a procedure which provided standardized techniques for examining all of the site collections excavated during the different WPA-era projects. Those records, now curated at the Columbus Museum, contain analysis sheets for 2240 sherds along with some summary sheets and partial coding instructions. Even with the coding sheets, some of the attributes used in the 1930s are difficult to understand and interpret. Some of the attribute terminology, for instance, is no longer used. While a lack of a descriptive text accompanying the NPS summary sheets makes interpretation of some of the data rather difficult, we are fortunate in that a number of these pottery attributes were also tabulated by Schnell (1963). A number of detailed artifact drawings were produced following the WPA excavations. Figure 124 illustrates several examples of these drawings. The drawings that survive do not illustrate the full range of Bull Creek pottery, but appear to concentrate upon incised and punctate examples.

Table 35. Presentation of Scarry's (1985) incised types and varieties of the Bull Creek phase.

Type	Variety	Description
Lamar Complicated Stamped	Bull Creek	Coarse sand-tempered pottery decorated with Figure-eight designs
Lamar Complicated Stamped	Early	Coarse sand-tempered pottery decorated with concentric circle designs
Lamar Bold Incised		Subsumes all vessels tempered with coarse sand or grit that are decorated with a band of broad, deeply incised lines on the upper portion of vessel (carinated bowls and cazuela bowls). Motifs are continuous bands of curvilinear scrolls or lines of pendant loops composed of 5 to 15 lines (Scarry 1985:221).
Fort Walton Incised		Subsumes all ceramics in the Fort Walton area with a sandy paste with decorations formed by incised lines with punctuation filled zones or occur on punctated backgrounds.
Fort Walton Incised	Fort Walton	Characteristic design is a band of running scrolls (both curvilinear and rectilinear) superimposed on a band of punctations. Vessel forms include cazuela bowls, beakers and bottles. Late but widespread variety (late prehistoric and protohistoric (Scarry 1985:215).
Fort Walton Incised	Cayson	Characteristic design is a band containing simple incised rectilinear step figures that separate alternating plain and punctuation filled zones. Vessel form is carinated bowl (Scarry 1985:215).
Fort Walton Incised	Englewood	Characteristic design formed by narrow, punctuation-filled bands that form abstract rectilinear figures including complex interlocking maze forms, diamonds, triangles, zigzag bands or connected chevrons. Found in Rood and Lake Jackson phase context but most common in Safety Harbor (Scarry 1985:219).
Fort Walton Incised	Safety Harbor	Characteristic design is curvilinear equivalent of variety Englewood. Vessel forms include beakers, bottles and bowls. Most common in Safety Harbor area (Scarry 1985:219).
Fort Walton Incised	Sneads	Characteristic design is curvilinear equivalent of variety Cayson (Scarry 1985:219).
Point Washington Incised		Subsumes all ceramics from Fort Walton area with sandy paste decorated with medium curvilinear incised lines.
Point Washington Incised	Point Washington	Characteristic motif consists of a series of horizontal running or interlocking scrolls. Vessel forms include carinated bowls, cazuela bowls, bottles and beakers. Late variety found in Bull Creek and equivalent phases (Scarry 1985:230).
Point Washington Incised	Griffith	Characteristic designs are a variety of representational forms, many of which are part of Southern Cult iconography. Vessel forms include carinated and cazuela bowls. Chronologically late, found in Bull Creek and protohistoric sites (Scarry 1985:230).

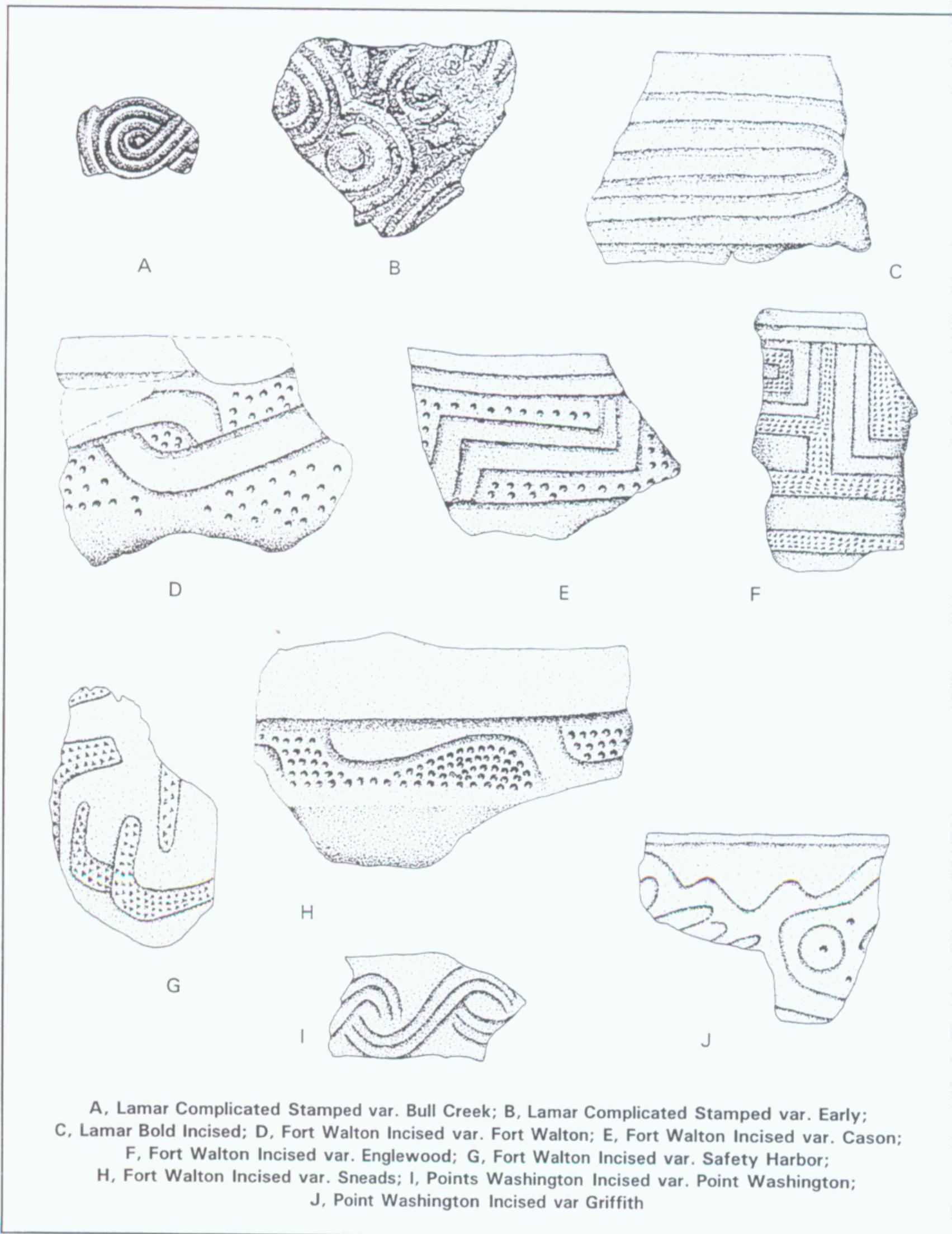


Figure 123. Illustrations of Fort Walton pottery types associated with the Bull Creek phase (redrawn from Scarry 1985).

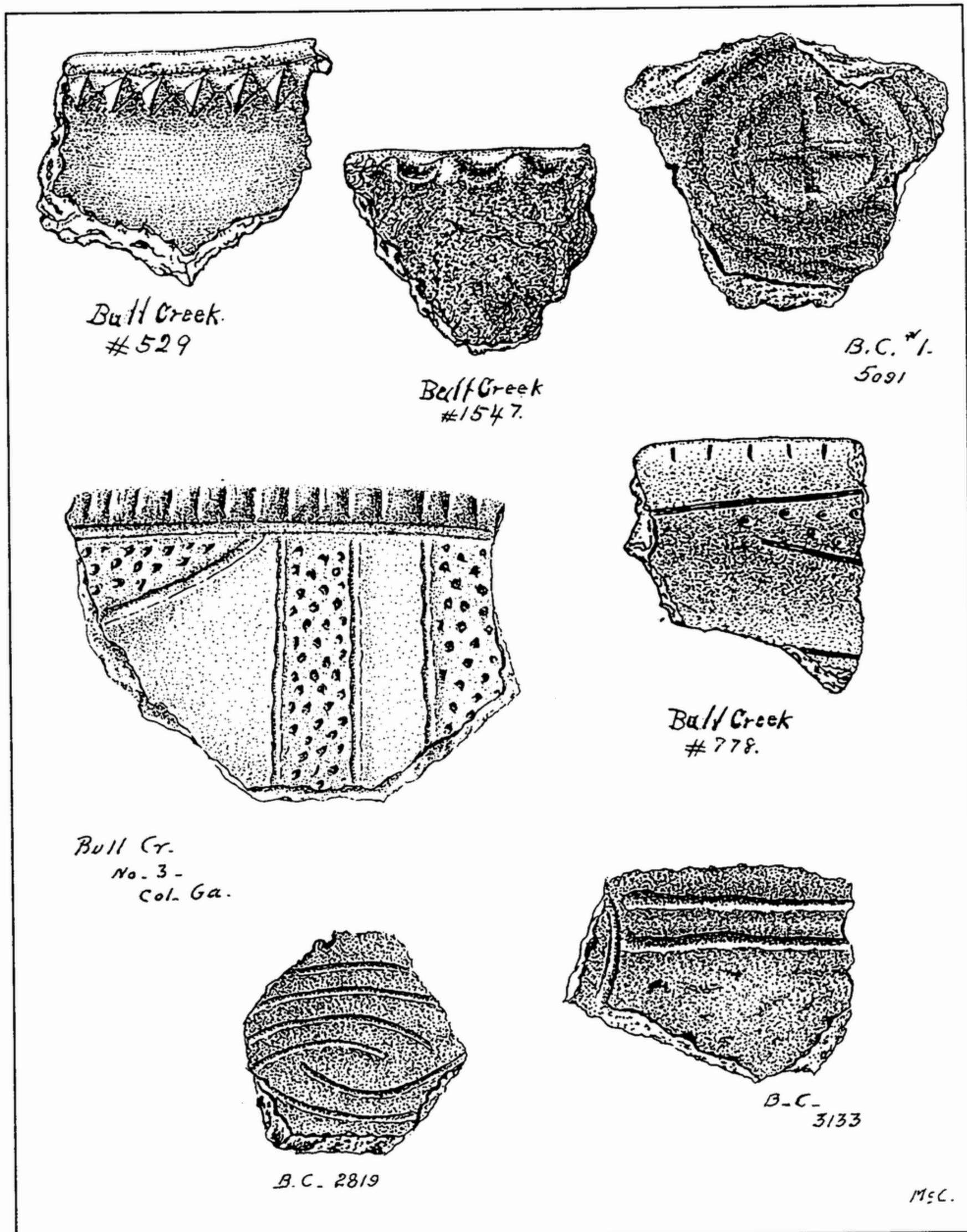


Figure 124. NPS files drawings of Bull Creek site pottery recovered during the 1936-1937 excavations.

With respect to quantifiable data, the most important collection available resulted from Schnell's 1959 excavations (Schnell 1963). This represented the first screened collection from the site. Excerpts of the text and selected tabulations are taken from Schnell's Bull Creek excavation manuscript. Photographs of sherds have been included to further define many of the attributes examined. Schnell's pottery descriptions were the basis of the SAS analysis of Bull Creek phase pottery for the Bull Creek and Victory Drive sites.

As may be seen in the table [Table 36], the basic analysis of the pottery recovered from the 1959 excavations was done from a purely modal standpoint. The following paragraph correlates these modal categories with ceramic types. All of the pottery presented in this table falls within the Lamar series as partially defined in the Southeastern Archaeological Conference Newsletter (I, 2:4-6, 9-11). Some of the type names used here have not been officially designated, but have found their way into common usage

The plain ware was divided into three major categories according to tempering mode; grit, sand and shell [Figure 125]. For purposes of present commentary, it might be mentioned that the grit tempering category is the same as the Bull Creek variant of Lamar [which designates a paste that contains large particles of garnet-bearing grit

extruding from the exterior and sometimes the interior]. The sand tempered category covers a gradient range from very similar to Bull Creek variant of Lamar to a very fine sand tempering. This very fine sand tempering finds its analogy in Hurt's (1975) historic and proto-historic ware which he designated as Coweta Micaceous.

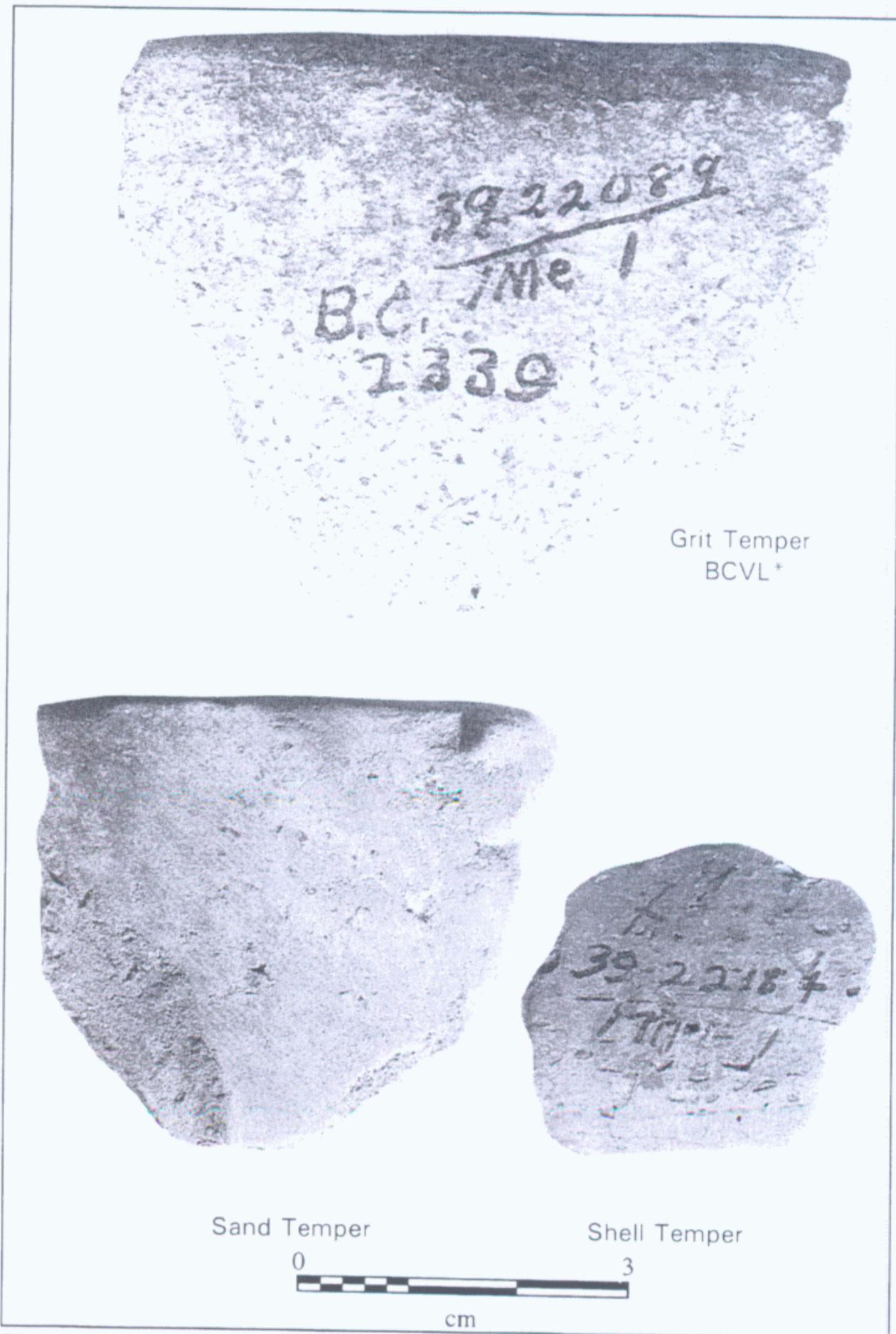


Figure 125. Enlarged photographs showing tempering agents found at Bull Creek and Victory Drive (BCVL represents Bull Creek paste variant of Lamar).

The Victory Drive Site

The shell tempered category at the Bull Creek Site is primarily a partially leached form, indicating some, but not considerable antiquity.

The complicated stamped ware may be easily assignable to the type Lamar Complicated Stamped, with the exception that it has the Bull Creek variant of tempering. This exception also applies to check stamped, defined by W.H. Sears (1951:32) as Mercier Check Stamped. The bold incised category falls in more of a coarse sand tempering than of the tempering characteristic of the Bull Creek variant of Lamar. This type is therefore named as Lamar Bold Incised, with no particular distinction being made. The zone incised category finds its stylistic origins in Fort Walton Zone Punctated, but here again, the tempering is

characteristic of the Bull Creek variant of Lamar. The punctated category seems to be most closely related to an undescribed punctated type in the original Lamar series. The engraved category is so sparsely represented here that no attempt will be made to discuss it extensively. It will simply be stated that this one example of engraving was found on a black burnished sherd and is very similar to earlier Mississippian engraved types except for the fact that it is sand tempered rather than shell tempered. Finally, the red painted category, though statistically insignificant, should be mentioned since it is frequently found as a very minor type in many Lamar sites . . . Figures 126 and 127 illustrate typical examples of Bull Creek phase stamped, incised and punctate sherds found on the Bull Creek and Victory Drive sites.

Table 36. Ceramic counts from Schnell's 1959 excavations.

Surface Treatment	Sherd Total	Percent (Mode)	Percent (Type)
Plain (undecorated)			
Grit tempered	2460	79.92%	
Sand tempered			
smoothed surface	474	15.40%	
burnished surface	136	4.42%	
Shell tempered	8	0.26%	
Total Plain	3078	100.0%	36.92%
Complicated Stamped	4903	98.12%	
Check Stamped	94	1.88%	
Total Stamped	4997	100.0%	59.95%
Incised Punctated			
Bold Incised	150	59.06%	
Zoned Punctated	99	38.98%	
Punctated	4	1.57%	
Engraved	1	0.39%	
Total Incised and Punctated	254	100.0%	3.05%
Painted			
Red Painted	7	100.0%	
Total Painted	7	100.0%	0.08%
Total Sherds in Lamar Series Collection	8,336		100.0%

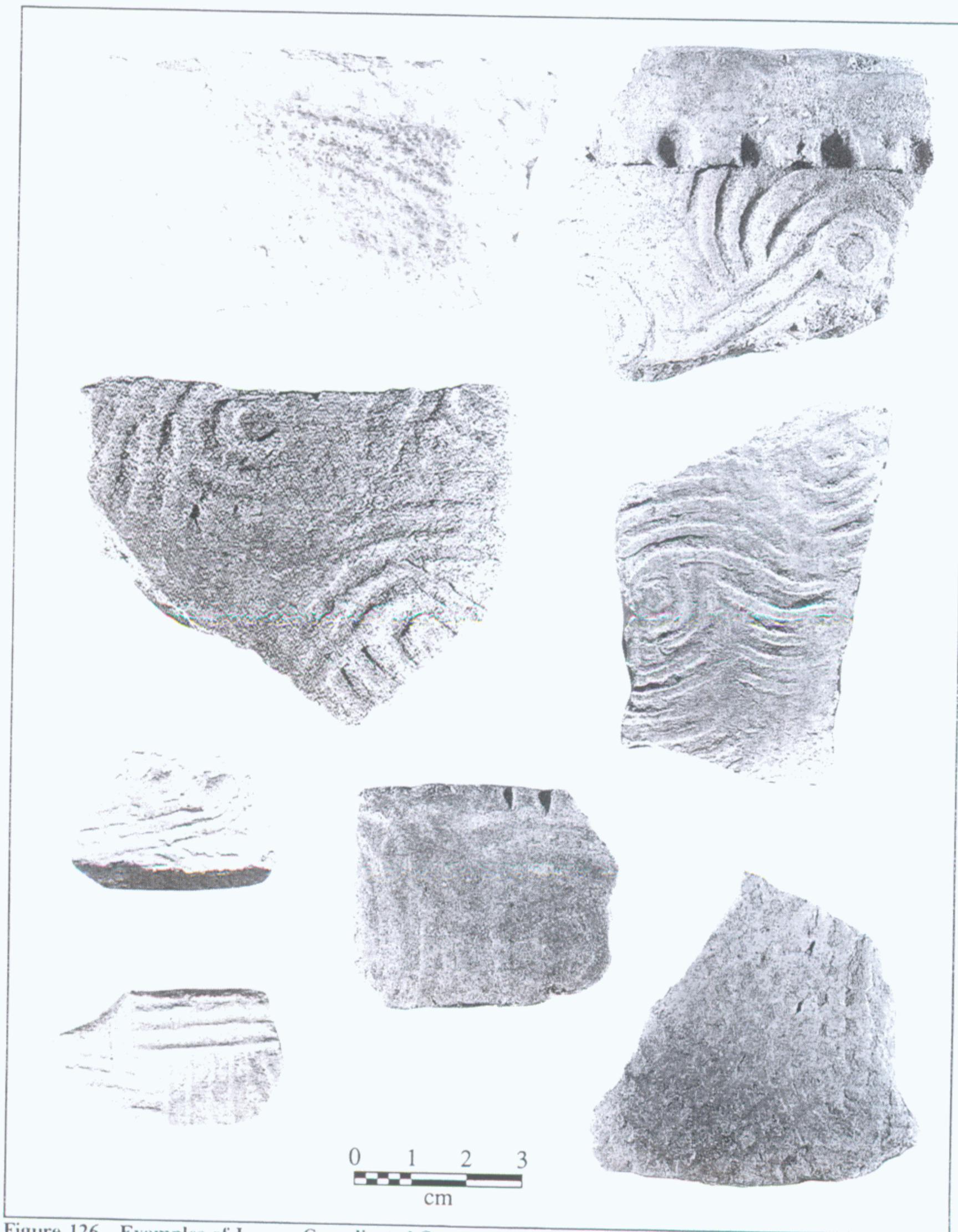


Figure 126. Examples of Lamar Complicated Stamped and Mercier Check Stamped (bottom right) sherds from Bull Creek (various collections). The upper left sherd shows typical overstepping.

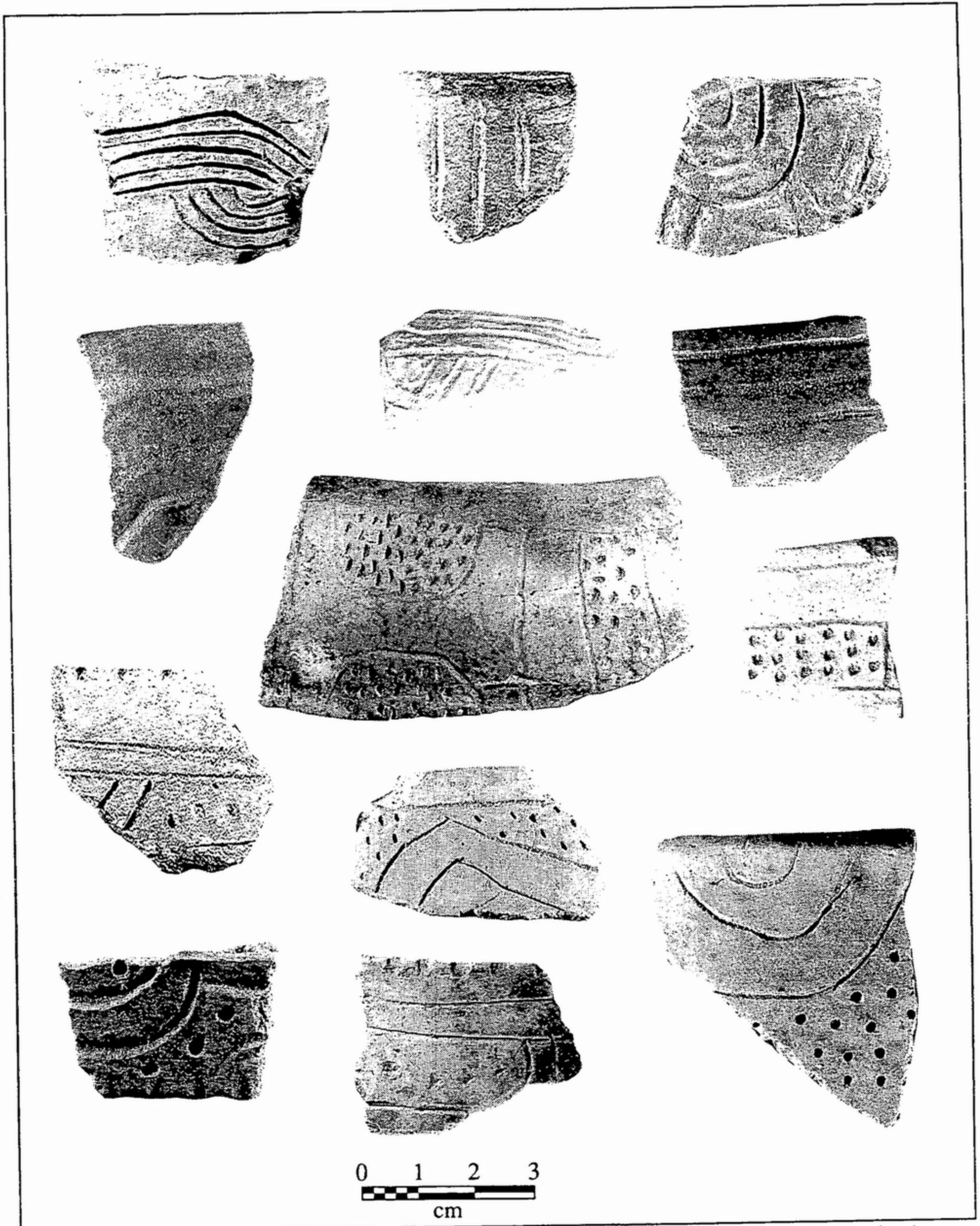


Figure 127. Typical examples of incised and punctated sherds from Bull Creek (various collections).

Schnell also examined pottery from the 1950 investigations of Kelly. A total of 3,225 sherds was analyzed from Kelly's excavation (Schnell 1963). Schnell's analysis resulted in a slightly lower percentage of complicated stamped pottery compared to his 1959 work. The WPA percentages also varied as noted in Patterson's 1936 paper and the NPS summary sheets. This indicates there is variation in percentages from different collections that may be, in part, a factor of differing recovery techniques. A comparison of four collections made prior to 1994 (Figure 128) shows the frequencies of these wares from four investigations at Bull Creek (the 1993 SAS survey material is included as the fourth collection).

Tabulations from Schnell's 1959 excavations are the basis for defining the ceramic composition pottery of the Bull Creek phase, at least with respect to surface treatment. These counts show a predominance of complicated stamped wares (> 50 percent) followed by plain, incised/punctate and check stamped (Schnell 1990:67). By accepting Schnell's (1963) assessment that no stratigraphic differences existed in the portion of the site investigated in 1959, we may accept Schnell's figures as the definitive characterization of Bull Creek phase pottery with respect to surface treatment. The small SAS collections show strong parallels in percentages to the 1959 excavations.

Comparison of Bull Creek Pottery
From Four Excavations

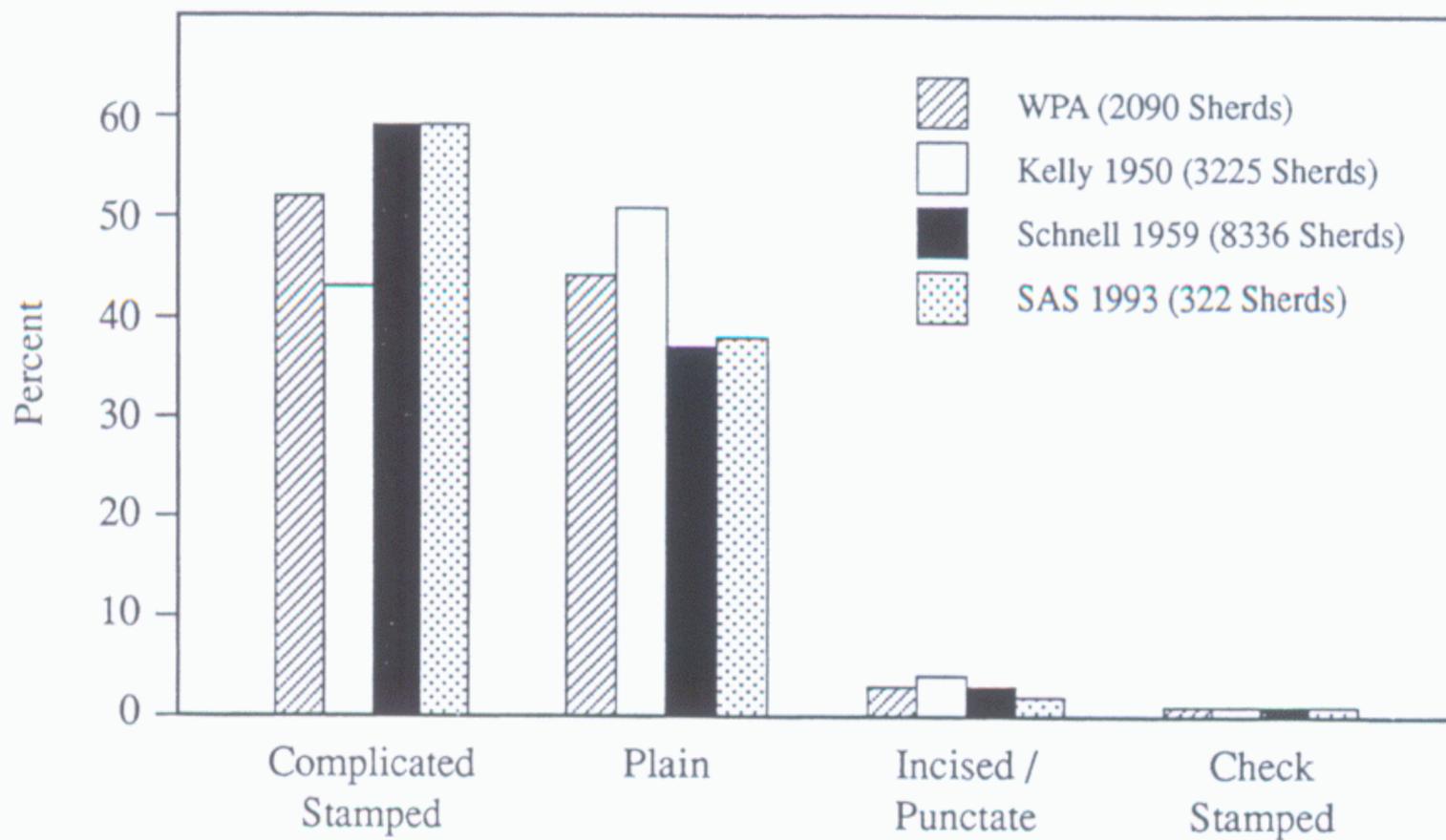


Figure 128. Comparison of pottery counts from four archeological investigations of the Bull Creek site (the WPA sherd count of 2090 excludes sherds from a category listed as modeled).

Summary of Bull Creek phase pottery from data recovery of the Victory Drive site.

On its own, the collection of pottery recovered during data recovery of the Victory Drive site can add little to our understanding of the Bull Creek phase. Because plain sand-tempered sherds, which make up a minority of Bull Creek pottery, cannot be separated from similarly tempered sherds of other components, a precise count is not possible. Additionally, most sherds were quite small.

As demonstrated in the analysis of pottery from the Bull Creek site, large sherds are required in order to determine decorative motifs and vessel form (Ledbetter 1995c:187). A few large rim sherds were recovered during data recovery of Victory Drive and these sherds have been included in the larger study relating to the Bull Creek site (Ledbetter 1995c:Appendix C). The results of that study will be summarized later in this chapter. A tabulation of Bull Creek phase pottery from data recovery is shown in Table 37.

Table 37. Identified Bull Creek phase sherds recovered during data recovery of Victory Drive.

Provenience	Surface Treatment				Total
	Complicated Stamped	Plain	Incised/Punctate	Check Stamped	
North					
Surface	0	1	0	0	1
Test Pits 1-2	1	2	0	0	3
Test Pit 3	6	1	0	0	7
Test Pit 4	1	2	0	0	3
Test Pit 5	0	2	0	0	2
Test Pit 10	1	2	0	0	3
Northern features	0	0	0	0	0
Subtotal	9	10	0	0	19
South					
Shovel Tests	0	2	0	0	2
Trench 60 N	1	0	0	1	2
Test Pit 6	43	24	5	3	75
Test Pit 7	18	6	2	0	26
Test Pit 8	12	11	3	0	26
Test Pit 9	39	17	6	0	62
Block B gully	6	3	0	0	9
Block B Fea. 94	1	0	0	0	1
Block B Fea. 2	170	74	15	2	261
Block D features	5	9	5	0	19
Subtotal	295	146	36	6	483
Total	304	156	36	6	502
Percent of Total	60.5%	31.1%	7.2%	1.2%	100.0%

Data recovery produced slightly more than 500 sherds that could be confidently identified as Bull Creek phase pottery. With the exception of a very few sand-tempered sherds found in feature context in Block D, all were identified by a distinctive surface treatment or the distinctive garnet-rich grit tempering that Schnell has defined as Bull Creek variant of Lamar paste (Schnell 1963).

Our inability to sort many of the plain sand-tempered sherds and some grit-tempered sherds from sherds of other components should be evident when percentages are compared to the earlier collections shown in Figure 128. Complicated stamped pottery, which was readily identified, occurs with twice the frequency of plain in the data recovery totals and is out of proportion when compared to previous collections. Compared to Schnell's counts (see Table 35), the data recovery percentages are high for complicated stamping and incising and low for plain pottery.

Bull Creek phase sherds are distributed across the Victory Drive site but display a conspicuous drop-off in frequency from south to north. In test pits excavated in the southern portion of the site, Bull Creek phase sherds occur with a frequency of 6.5 to 18.8 sherds per m² compared to 0.5 to 1.8 sherds per m² in the north. There are also interesting differences evident in sherd densities in Block D where a Bull Creek phase structure was identified. In combined Test Pits 6 and 9, which lie outside the structure, the Bull Creek phase sherd density is 17.1 per m². Inside the structure, as sampled by Test Pits 7 and 8, the density is 6.5 per m². These figures support the logical expectation that most broken vessels would be removed from the structure as a part of ordinary housekeeping and discarded elsewhere.

As previously noted, the data recovery pottery collections were incorporated into a larger ceramic study that focused upon the Bull Creek site (Ledbetter 1995c). The results of

that study will be summarized in order to provide greater interpretive context for the collections from this project. The Bull Creek study included a reexamination of the pottery types described by Schnell (1963) and detailed vessel form analysis.

Description of all Bull Creek phase pottery types from the Bull Creek and Victory Drive sites.

Our ceramic study included pottery from several collections. Included were collections made by Lester (1938); Kelly (1950); Schnell (1963); Fuller (1980); and SAS material recovered during the survey and data recovery phases. Detailed analysis was predominantly limited to rim sherds.

Bull Creek phase pottery might be viewed as a hybrid of ceramic styles with some similarities to Lamar and some similarities to Fort Walton. The pottery does not always fit snugly into established type descriptions. Schnell's term Bull Creek variant is the most appropriate designation of the pottery series. This means that vessel types and decorative styles typical of either Lamar or Fort Walton occur on the site, but these vessels are tempered with a distinctive, garnet-rich grit. The size of the temper varies from 0.7 to 3.0 mm (average 1.4 mm). Heavy grit tempering appears to be a characteristic of late Lamar in western Georgia; however, the distinctive nature of the site's temper may be a localized phenomenon reflecting local clay and sand resources.

The recognition of a distinctive Bull Creek variant of temper does not mean that every vessel was tempered the same. In the Bull Creek and Victory Drive collections, some vessels of all pottery types are tempered with finer grit or sand. This applies most strongly to the incised wares.

Schnell's 1963 manuscript references an appendix that contains formal descriptions of the pottery types found at Bull Creek. Unfortunately, the appendix has not survived and we are limited to the more general characterizations found within the manuscripts of Schnell and Chase. For the most part, those descriptions have adequately described the pottery types, particularly when referenced to the original type descriptions. Lacking in the descriptions of Chase and Schnell are adequate comparisons to Fort Walton ceramics. For this reason, the work of Scarry (1985) will be incorporated into the descriptions. Our examination indicated that certain surface decorations were more common on specific vessel forms which is consistent with other research where the combined attributes of decoration and vessel form have been used successfully in the examination of pottery types (Schnell et al. 1981; Scarry 1985). In the following summary, descriptive categories used for Bull Creek pottery will be examined.

Plain wares from the Bull Creek and Victory Drive sites may be considered variants of Lamar Plain or Lake Jackson Plain (Willey 1949:458). Schnell (1963) divided plain wares from Bull Creek into three categories according to tempering. These categories consisted of grit (79.9 percent), sand (19.8 percent) and shell (0.2 percent). Schnell implied that the heavy grit tempered category should be referred to as Bull Creek variant of Lamar. Schnell also noted that the finest sand temper found on pottery from Bull Creek was similar to historic and proto-historic ware designated as Coweta Micaceous (Hurt 1975). Since we now know that the Bull Creek site does contain an historic Creek component, the association of this pottery type with the Bull Creek phase might be questioned. Schnell noted that the few shell tempered sherds were partially leached, indicating some, but not considerable antiquity (Schnell 1963). There is the possibility that the shell tempered sherds postdate the Bull Creek phase (Abercrombie phase).

There are several characteristics associated with rim modifications at Bull Creek which are common on Lake Jackson Plain vessels but uncommon on Lamar vessels. Rim notching and applied rim strips that are either pinched or noded are particularly common on Lake Jackson Plain vessels (Willey 1949:459). Scarry applies the type Lake Jackson Plain varieties Ingram and Tallahassee to the Bull Creek phase (Scarry 1985:221). Variety Tallahassee contains small amounts of grog temper but has not been recognized in any examination of pottery from the Bull Creek site. Lake Jackson Plain variety Ingram, which does apply, is described as a variety with coarse grit and smoothed surfaces, common to the Rood and Bull Creek phases and in the Appalachicola Valley, the Yon phase (Scarry 1985:221).

Scarry's variety Ingram is based in part upon the type Ingram Plain which was defined at the Cemochechobee site in Clay County (Schnell et al. 1981:185). The definition for Ingram Plain suggested synonymy with the types Lake Jackson Plain, Pinellas Plain, Coweta Micaceous Utility Ware and a relationship to Lamar Plain. Ingram Plain vessels were primarily open bowls often exhibiting notched lips and sometimes exhibiting applied notched strips. The type was considered the apparent predecessor of Lamar Plain and with the addition of pinched folds and fillets, the type probably developed into Lamar Plain of the succeeding Bull Creek phase (Schnell et al. 1981:185-188).

Based upon the results of previous research, it would appear that either Lake Jackson Plain variety Ingram or Lamar Plain equally appropriate designations. With respect to vessel form, the plain wares from Bull Creek and Victory Drive are associated primarily with simple bowls, accounting for 41.1 percent of those types. Secondarily, plain jars occur to a substantially lesser extent (20.5 percent).

Complicated Stamped Wares found on Bull Creek phase sites have been identified as Lamar Complicated Stamped. This absence of complexity follows the proposition that any poorly executed complicated stamping should be called Lamar. Schnell's (1963) observation was simply that the complicated stamped ware may be easily assignable to the type Lamar Complicated Stamped, with the exception that it has the Bull Creek variant of tempering (Schnell 1963). Scarry concluded that the type Lamar Complicated Stamped includes all coarsely tempered complicated stamped vessels found in the Fort Walton area (Scarry 1985:221).

Scarry defined two varieties of Lamar Complicated Stamped that should apply to the Bull Creek site (see Figure 123). Lamar Complicated Stamped variety Bull Creek is a coarse sand-tempered ware with figure-eight designs. The type site for the pottery variety was 9Ca51 (Broyles 1962), which Schnell now dates to the ensuing Stewart phase (Schnell and Wright 1993:21). Scarry also defined Variety Early for pottery containing motifs consisting of sets of concentric circles, the centers of which may contain raised dots or crosses. Variety Early was considered the dominant type of the Yon phase in the Apalachicola Valley and present in the Bull Creek phase.

In the project collections, Lamar Complicated Stamping was found on 78.3 percent of the jars and 41.1 percent of the simple bowls present in the vessel form analysis collection of 219 rims. Complicated stamping was not associated with other types of bowls or bottles.

Check Stamping in the Bull Creek phase is generally referred to as Mercier Check Stamped based upon similarity to material from Kolomoki (Sears 1951). Schnell noted that Mercier Check Stamped at 9Me1 should be viewed as a Bull Creek variant because of its distinctive grit tempering (see Figure 126). Scarry views the pottery as a variant of Leon Check Stamped, which

includes all coarsely tempered and boldly check stamped ceramics in the Fort Walton area (Scarry 1985:225). Scarry prefers Leon Check Stamped variety Mercier as a name for the bold check stamped pottery (often with checks up to 1 cm) of the Bull Creek and Yon phases. In the project collections, check stamped designs were identified on three vessel types: jars, collared bowls, and simple bowls.

Incised and Zone Punctate Wares represent perhaps the most difficult to interpret pottery found at the Bull Creek and Victory Drive sites. The pottery has been referred to as either Lamar Bold Incised or Fort Walton Zone Punctate. Schnell (1963) suggested that because bold incising at the site occurred more with a coarse sand tempering than with the temper characteristic of the Bull Creek variant of Lamar, the name Lamar Bold Incised should be used. Schnell felt the zone incised and punctate sherds were variants of Fort Walton Zone Punctated, with tempering characteristic of the Bull Creek variant of Lamar. The punctated wares were viewed as an undescribed punctated type in the original Lamar series (Schnell 1963).

Chase identified Lamar Bold Incised by deeply incised, curving lines, sometimes consisting of only two or three parallel lines circumscribing the vessel or with interlocking loops. He included a variant of the Fort Walton Punctate within Lamar Bold Incised although for most sherds these could not be distinguished from the classical Fort Walton punctate type (Chase 1957).

As a part of the analysis of the Bull Creek pottery, measurements were taken on the widths of incised lines of pottery that appeared to conform to Lamar and pottery with Fort Walton incised and punctate designs. Incised sherds were also sorted by temper size to examine Schnell's observations. Perhaps, due to small sample size (61 sherds), the results were inconclusive (see Ledbetter 1995c:133).

Comparison of the incised motifs associated with the Bull Creek and Stewart phases shows them to be clearly different from "typical" Lamar assemblages (see Hally 1994: 153). Hally found that within each Lamar phase, certain motifs occur with greater frequency. This is especially interesting for the Bull Creek phase because Hally notes that one motif, similar to Pinellas Incised (see Figure 122), occurs on more than fifty percent of the identifiable sherds in his sample (Hally 1994: 154). In light of the fact that published data available to Hally came primarily from two sites (Park Mound and 9Ca51), which Schnell now believes postdates the occupation of the Bull Creek site, Hally's observations are useful for contrasting incised motifs from the three sites.

During our examination of the project area collections, all incised designs were drawn as a part of the analysis. Most were too small to provide any meaningful indication of design. Eventually 79 sherds were found of sufficient size to determine all or part of a design. Several of these were vessels reconstructed by the National Park Service. Because of the wide variability present on the zone punctate vessels, generalized rectilinear and curvilinear design categories were selected when there was substantial variability. Table 38 describes the criteria used to distinguish these motifs. Figure 129 illustrates examples of design pattern found in the Bull Creek collections.

Table 38. Incised design categories identified from the Bull Creek/Victory Drive site collections

Category	Description	Count
A	Band of interlocking scrolls (guilloche) with dot (punctate) filler (Fort Walton Incised).	9*
B	Simple curvilinear stepped band alternating with punctate band.	2
C	Parallel undulating bands with alternating punctate fillers.	1
D	Simple continuous undulating band with punctate fillers.	1
E	Complex designs of punctate filled oval and rectilinear elements alternating with clear zones or elements.	17*
F	Rectilinear step elements with alternating punctate-filled and clear zones.	24*
G	Concentric half-circles against a with a punctate background	1
H	Concentric half-circles bordered by parallel lines.	3*
I	Concentric circles	1
J	Band of interlocking scrolls without punctate filler (Point Washington).	5*
K	Running or interlocking open scroll.	3*
L	Running Scroll (Pinellas Incised)	1*
M	Simple looping pattern.	1*
N	Multiple parallel lines.	3
O	Simple half circle single line loops at rim.	2
P	Simple discontinuous rectilinear and curvilinear incised elements below rim.	4*
Q	Hand-Eye motif	1

*One or more examples recovered from the probable Stewart phase feature excavated in 1981.

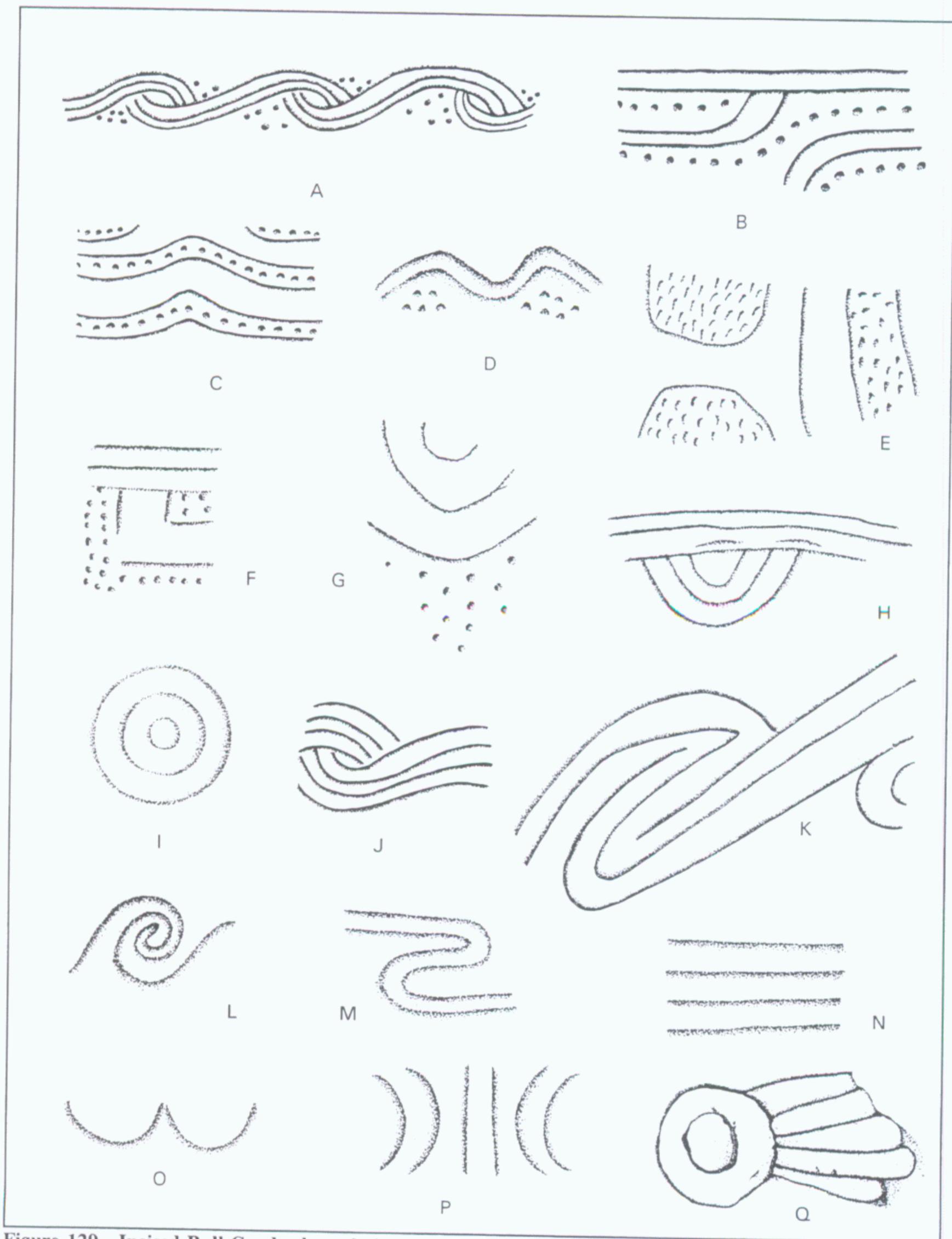


Figure 129. Incised Bull Creek phase designs found in the project collections (compare Table 38).

In examining the incised motifs found at Bull Creek, one point becomes obvious. Most of the designs are common Fort Walton decorative patterns and not Lamar. There are few typical Lamar designs. Design Category H consists of nested half circles bordered by parallel lines and is most similar to a Lamar Bold Incised motif. The recovered examples contain two to four lines.

Recognition of Design Category L is particularly meaningful because it represents the most common form of Pinellas Incised. As previously noted, Schnell now considers this style of incising to be typical of Stewart phase but not Bull Creek phase. At the Bull Creek site, this single sherd was found in a probable Stewart phase feature.

In the project collections, incising and zone punctations occur entirely on bowls. Incising and punctations were present on 16 percent of simple bowls and an extremely high 97 percent of carinated bowls. The carinated bowls with incising and zone punctations are particularly typical of Fort Walton styles.

Negative Painted Wares relate primarily to painted water bottles or dog pots found in the Bull Creek cemetery excavations (Figure 130). There are a few references to fragments of painted pottery found in the general midden of the cemetery area excavations (Lester 1938: 54), but these sherds were not relocated in our examination of the collections. Schnell does identify one sherd from Kelly's collection.

The dog pots from Bull Creek include two variations of painting. The vessels from Burials 3 and 7 exhibited red spiral designs on a buff background, the third exhibited a black pattern on a reddish background. A third vessel is most

similar to a dog pot recovered from Neisler Mound (see Ledbetter 1995:Figure 147). All three designs on the Bull Creek dog pots are quite similar running scroll patterns superficially similar to Pinellas Incised.

In 1979 the Bull Creek negative painted pottery was given the type name Nashville Negative Painted variety Columbus and was considered a local copy of similar vessels from the northwest (Williams 1979). More recently, Scarry gave the Bull Creek pots a new type status as Columbus Negative Painted variety Columbus (Scarry 1985:213). Scarry defined Columbus Negative Painted to include all sand tempered vessels with indirect (negative) painting in the Fort Walton area, as a distinct type from the shell tempered Nashville Negative Painted wares. Scarry noted that the ware has thus far been found only in Rood and Bull Creek phase contexts. Variety Clay was recommended for the negative painted vessels from Cemochechobee, which differ in vessel form and painted design.

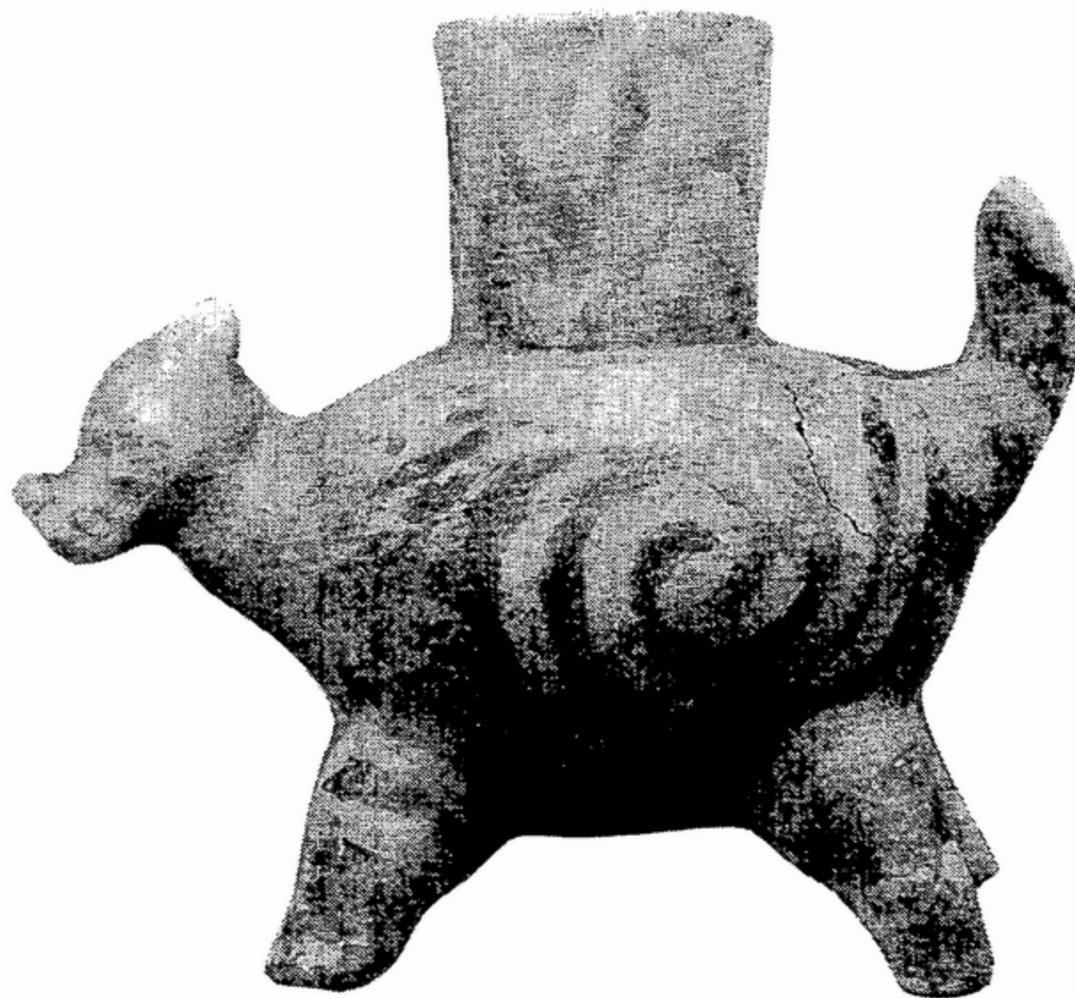


Figure 130. Negative painted vessel from 9Me1 (Burial 7).

Results of Bull Creek phase vessel analysis

The study of Bull Creek phase vessel characteristics using the collections from Bull Creek and Victory Drive focused upon rim attributes, vessel form and vessel size (Ledbetter 1995c:161-179).

Bull Creek vessels display rim forms and rim modifications typical of both Lamar and Fort Walton. The collections contain numerous examples of pinched rim strips, so common on Lamar vessels, and notched rims which appear frequently on Fort Walton vessels. Figure 131 shows examples of the more common rim forms found in the collections.

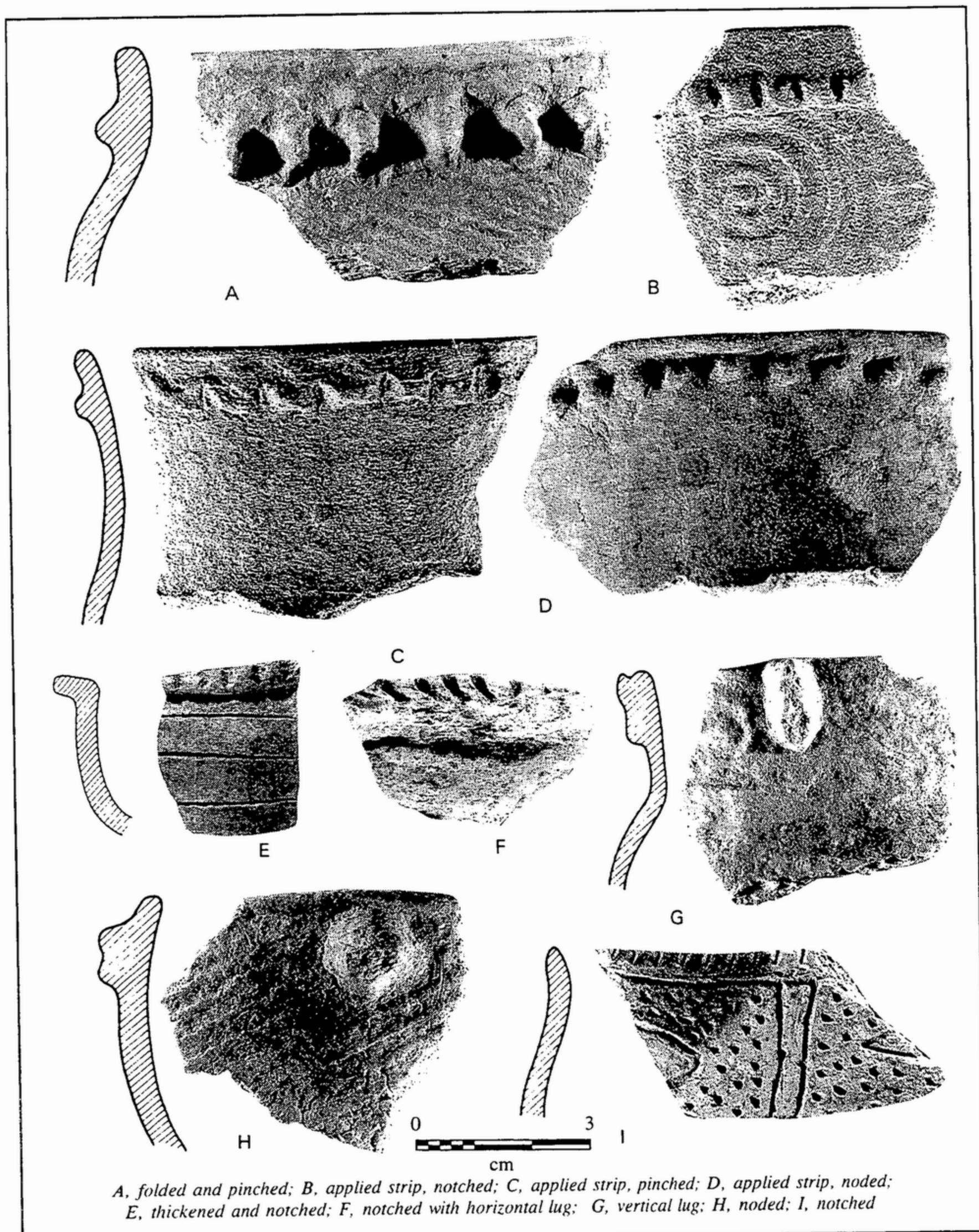
A detailed examination of rim sherds was conducted in the late 1930s. Following Lester's excavations, a large collection of rim sherds was sorted by rim type and correlated to vessel decoration. Figure 132 is a copy of the NPS summary sheet of attributes for 280 rims. With the exception of the undeciphered coding of the Lip Shape category, the remaining attributes and correlations are clearly tabulated.

The data presented in the National Park Service's summary sheet is valuable for examining both rim form and vessel decoration. The summary sheet provides counts of shape and decoration for rims and lips. Based on the summary sheet figures, the most common rim form curves outward and is decorated with an appliqued strip. The rim decoration referred to as appliqued is identified on 37.1 percent of all rims. Appliqued rims are formed by adding a strip of clay at the rim or a slight distance below the rim. Generally, this strip is pinched. When the rim collar is wide and extends down from the rim, it is generally referred to as a folded pinched rim and represents a typical Lamar jar style. The decoration category "gridbar" appears to be the same as check stamped.

The summary sheet data may be used to approximate some vessel traits. The figures comparing pot decoration and rim decoration show a predominance of plain vessels (57.9 percent), followed by stamped (28.9 percent), incised or punctate (12.5 percent), and check stamped (0.7 percent). These figures suggest the high percentage of complicated stamped pottery represented by counts of individual sherds (approximately 60 percent in Schnell's 1959 excavations) may have resulted from less than thirty percent of the vessels produced on the site.

A detailed examination of Bull Creek rims was also conducted by Schnell (1963). Schnell was able to distinguish 29 different types of rims (Ledbetter 1995c:164-165). The results of Schnell's analysis were generally consistent with the NPS analysis and further established the pattern of a predominance of specific rim treatments on specific vessel types. These patterns were further quantified in the vessel form analysis conducted by SAS (Ledbetter 1995c:Appendix C).

The width of rim folds (applied rim strips) is a critical analytical measurement with respect to Lamar pottery. The commonly proposed idea is that these rims get wider through time. Hally's examination of folded pinched rims from Park's Mound led him to conclude that the rims were sufficiently wide to indicate a late date (late sixteenth or early seventeenth century) for the occupation at that site (Hally and Oertel 1977:39). During the course of the present project, measurements were taken on folded pinched rims from various collections. A total of 112 folded pinched rims from the NPS collection were measured. That collection also included 59 rims with distinctly applied pinched strips which were generally placed about one centimeter below the lip. This is mentioned because there is some subjectivity involved in distinguishing sherds smoothed along the upper portion of an applied strip from sherds that are generally described as folded pinched rims.



A, folded and pinched; B, applied strip, notched; C, applied strip, pinched; D, applied strip, noded; E, thickened and notched; F, notched with horizontal lug; G, vertical lug; H, noded; I, notched

Figure 131. Examples of typical Bull Creek phase rim types.

	Rim Decoration							Lug Shape										Lug Decoration			
	Plain	Stamped	Incised	Applied	Punctate	Thumbbar	Pinched	10	10A	10B	20	20A	20B	30	30A	30B	30D	Plain	Notched	Scalloped	Flanged
Straight	67	26	6	7	23	1	3	17	6	4			2	3	4	2	5	5		3	
Curved In	74	33	25	10	2		3	13	19	4	1			3	3	2	1	4	22		4
Curved out	132	25	8	8	78	1	6	16	13	8				7	10	5	2	12	5		5
Folded	3	1		1										1	1						3
Flanged	4	2		1				1	1	1				1				3	1		12
	280	87	40	27	104	2	12	47	39	18	1		2	14	18	7	5	35	33		12

Bull Creek ^{Depth} 9 to 21

Bot Decoration	Rim Decoration							Incised Punctate		Total
	PLAIN	STAMPED	INCISED	GRIDBAR	APPLIED	THUMBBAR	Pinched	Punctate		
Plain	87					69	6		162	
Stamped		40				35	6		81	
Incised			27				6		33	
Gridbar				2					2	
Punctate								2	2	
Total	87	40	27	2	104	12	6	2	280	

Figure 132. Copy of the National Park Service Summary Sheet tabulating Bull Creek site rim attributes.

The folded pinched rims in the SAS study collection ranged in width from 11 to 28 mm and averaged 20.3 mm, wider than the 18 mm average from Park's mound (Hally and Oertel 1977:39). This comparison would seem inconsistent with Schnell's dating of Bull Creek as an earlier phase; however, it may also mean that certain concepts regarding rim fold width might stand further scrutiny, and that certain trends noted on "pure" Lamar sites may not necessarily apply to collections with Fort Walton influences.

Two additional attributes of rim decoration, handles and adornos, were examined. Chase (1957) noted that handles were not found on Lamar Complicated Stamped vessels at Bull Creek and there are no references in his manuscript to handles on other pottery types. Chase does note that rim adornos, usually lugs, nodes and more rarely effigies, usually of birds, occur on Fort Walton-style vessels and a type of burnished black slip ware

(Chase 1957). Schnell's summary tables list 11 lugs while the National Park Service summaries reference six handles/lugs. The handles appear to be vertically and horizontally placed lug handles. An examination of available collections produced several examples of lug handles (see Figure 131) and two or three flattened fragments of pottery which appear to be portions of small strap or loop handles. Large Lake Jackson-style loop handles which appear so frequently on Mississippian sites in the region do not appear to occur at the Bull Creek site. At the Bull Creek site, lug handles appeared to be restricted to plain and incised/punctate bowls.

The production of ceramic effigy figures is an important aspect of the Bull Creek pottery complex. This is most apparent in the effigy vessels and pipes found with burials. Effigies are also common on vessels as rim adornos and were found throughout the village area (Figure 133).

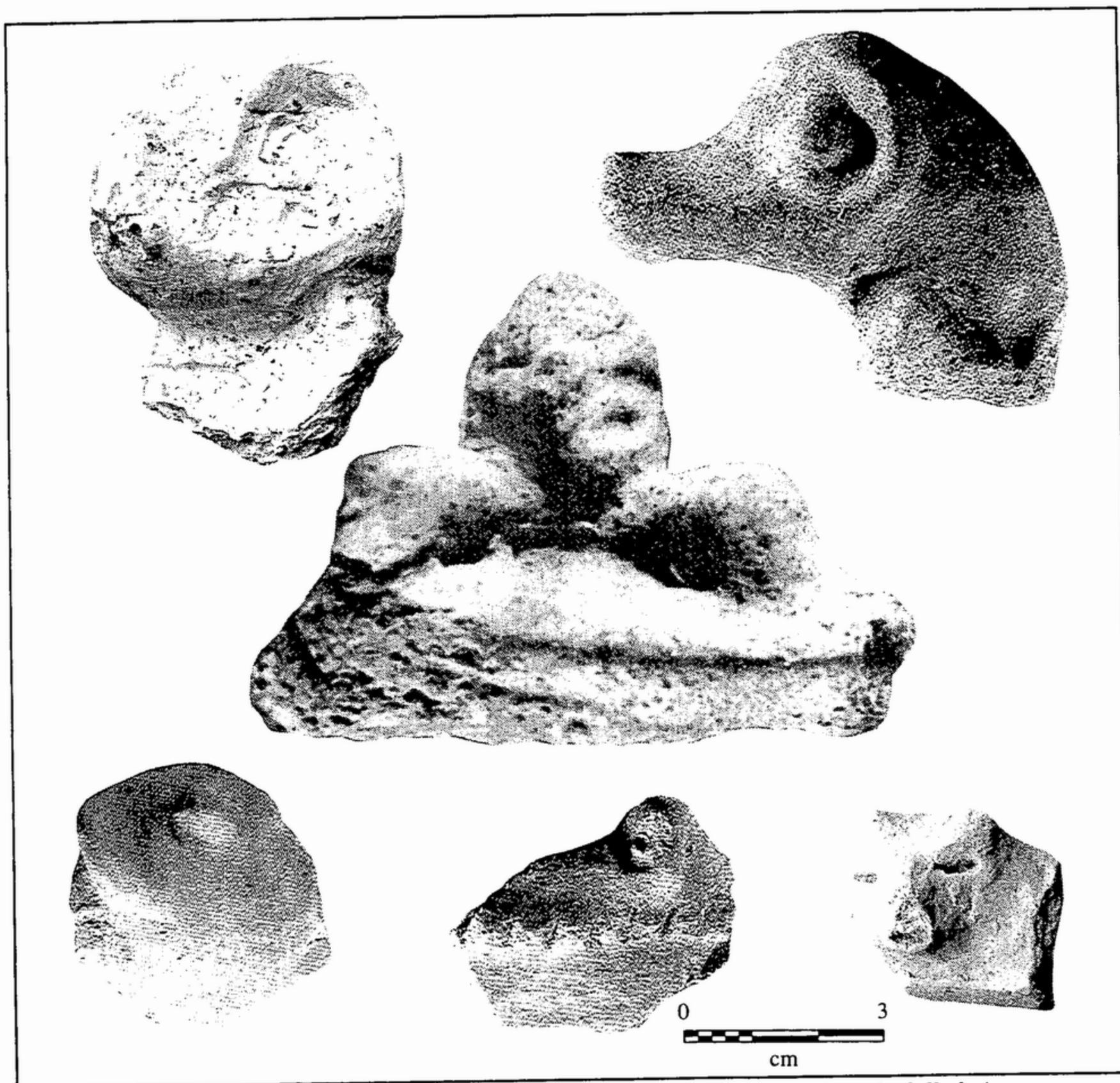


Figure 133. Effigy rim adornos from the Bull Creek site collections (approximately full size).

Most of the illustrated effigy objects in Figure 133 are animal figures of some type. The object illustrated in the center of the figure has been identified as a human representation. The effigy adorno was recovered from the midden deposits in the cemetery during the WPA excavations and numbered as Find 69. NPS notations describe the object as "Very remarkable rimsherd, in the form of a woman, with her arms raised to the back of her head.

Facial characteristics more or less of conventionalized form." (Lester 1937:91).

At Bull Creek, effigy rim adornos appear to be associated with Fort Walton-style bowls. Similar animal style adornos are found consistently on Mississippian sites and have been reported from other late Fort Walton and Bull Creek-related sites in the region (Willey 1949:504; Broyles 1971).

Bull Creek Phase Vessel Form Attributes

As one facet of the SAS pottery study, all large rim sherds were pulled and selected sherds were analyzed in detail to procure vessel form data that would allow further comparison to other Mississippian site analyses. An attempt was made to mend vessels and count only one rim sherd per individual vessel. Sherds were included in this analysis if they were sufficiently large to determine rim diameter, rim type, body decoration and vessel profile. Generally, a minimum rim size greater than 4 cm was required. Vessel form represents one aspect not sufficiently examined by previous researchers at Bull Creek. Our examination produced data for 219 vessels (Table 39). A total of six primary vessel forms was identified. Examples of the most complete vessels of each type are illustrated in Figures 134 and 135.

Of the 219 vessels only four, three dog pots and one small bowl, are burial objects. The remainder was recovered from the general midden or trash pits and are considered domestic or utilitarian vessels. Measured attributes of individual sherds were recorded and presented in the Bull Creek report (Ledbetter 1995c:Appendix C). The data will be briefly summarized.

Table 39. Vessel forms and counts from Bull Creek and Victory Drive (Minimum Number of Vessels).

Vessel Form	Count
Everted Rim Jar	83
Carinated Bowl	36
Collared Globular Bowl	2
Simple Constricted Rim Bowl	80
Open Bowl	15
Effigy Bottle (Dog Pot)	3
Total	219

Everted Rim Jars (N = 83) generally correspond to typical Lamar pinched rim jars. Our category applies to jars with well-defined neck constrictions and moderately everted to conspicuously flaring rims. Rim modifications include folded pinched rims (N = 50); applied strip below the rim that is noded (N = 10) or pinched (N = 5), individual nodes (N = 6) or lugs (N = 1) at or below the rim. A small number of jars have unmodified rims (N = 11). Body decoration consists of complicated stamped (N = 65), plain (N = 17), and check stamped (N = 1). Jars account for approximately two-thirds of the vessels decorated with complicated stamping in the sample. The remaining vessels with complicated stamping are simple bowls.

Rim diameters for jars range from 14 to 44 cm. Across this spread, 36.1 percent are small to medium jars of 30 cm or less and the remaining 63.9 percent are medium to large jars in the 32 to 44 cm range. A peak exists between 32 and 36 cm accounting for 41.0 percent of all jars. Jars account for 37.9 percent of the total vessels in this collection. Figure 136 shows the range of rim sizes for jars and other vessel types.

Research by Hally (1986:285-286) indicates the largest jars (40 cm and larger) were used for long term storage while medium sized jars were used as general purpose cooking vessels. The relative counts for jars compared to other vessel types at Bull Creek and the relatively high frequency of larger jars are comparable to permanently occupied late Mississippian sites (Hally 1986; Shapiro 1990).

Carinated Bowls (N = 36) are defined as constricted rim vessels with distinct shoulder break, which sometimes forms a well defined projecting keel or carination. The typical Lamar cazuela bowl is included in this category. The carinated bowls are typically decorated with Fort Walton incised and zone punctate patterns.

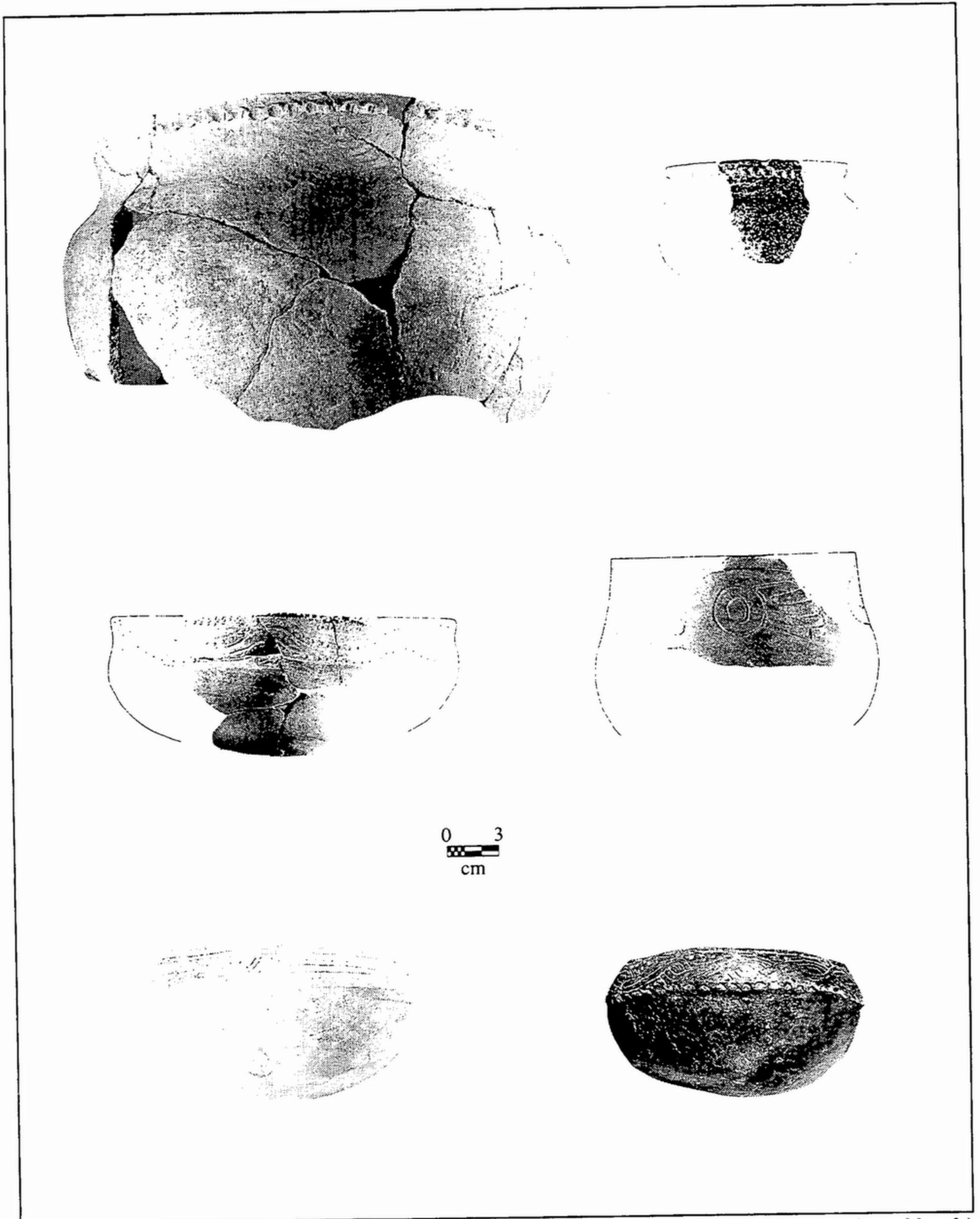


Figure 134. Typical vessel forms from the Bull Creek and Victory Drive collections (jars and carinated bowls)

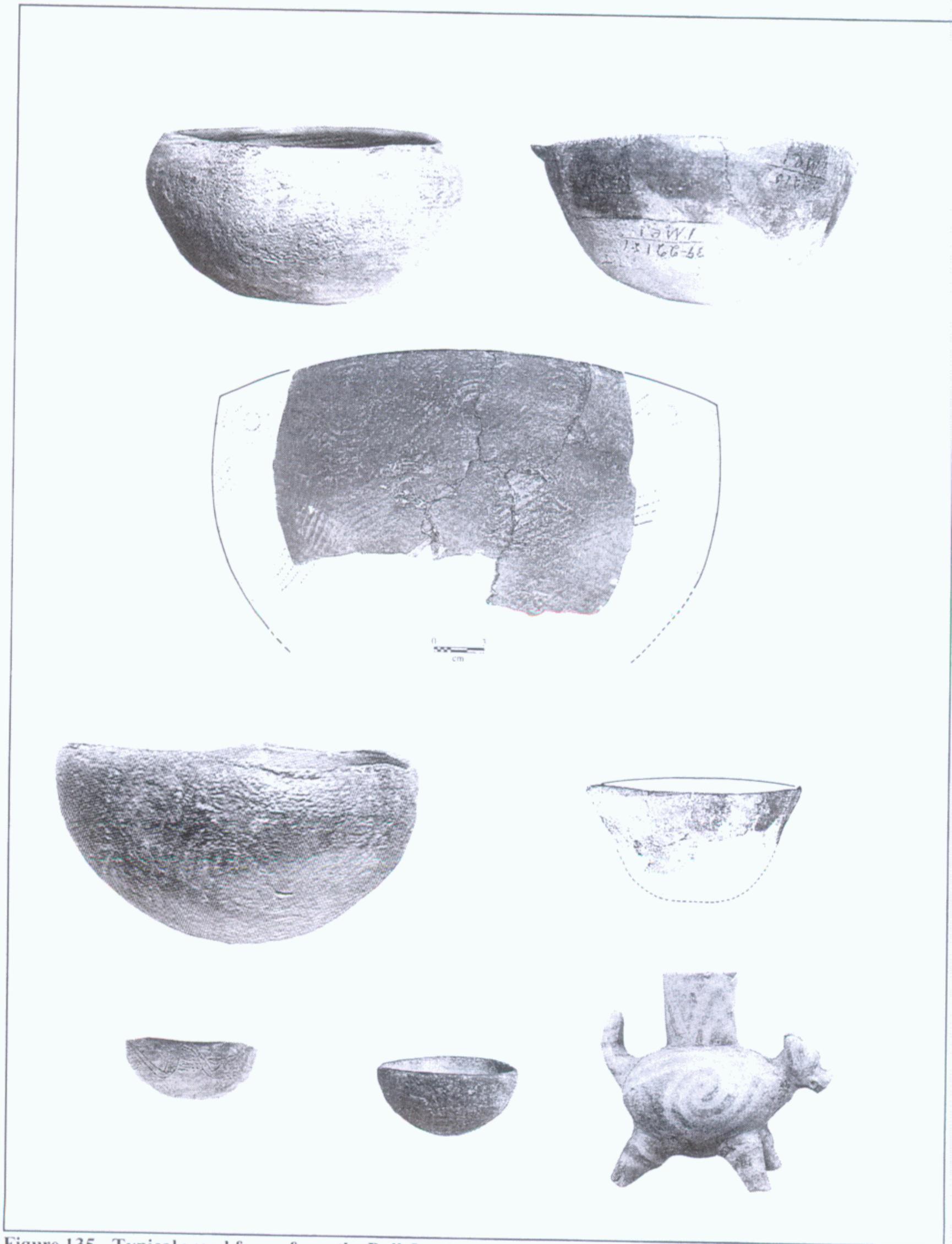


Figure 135. Typical vessel forms from the Bull Creek and Victory Drive collections (simple bowls and bottles)

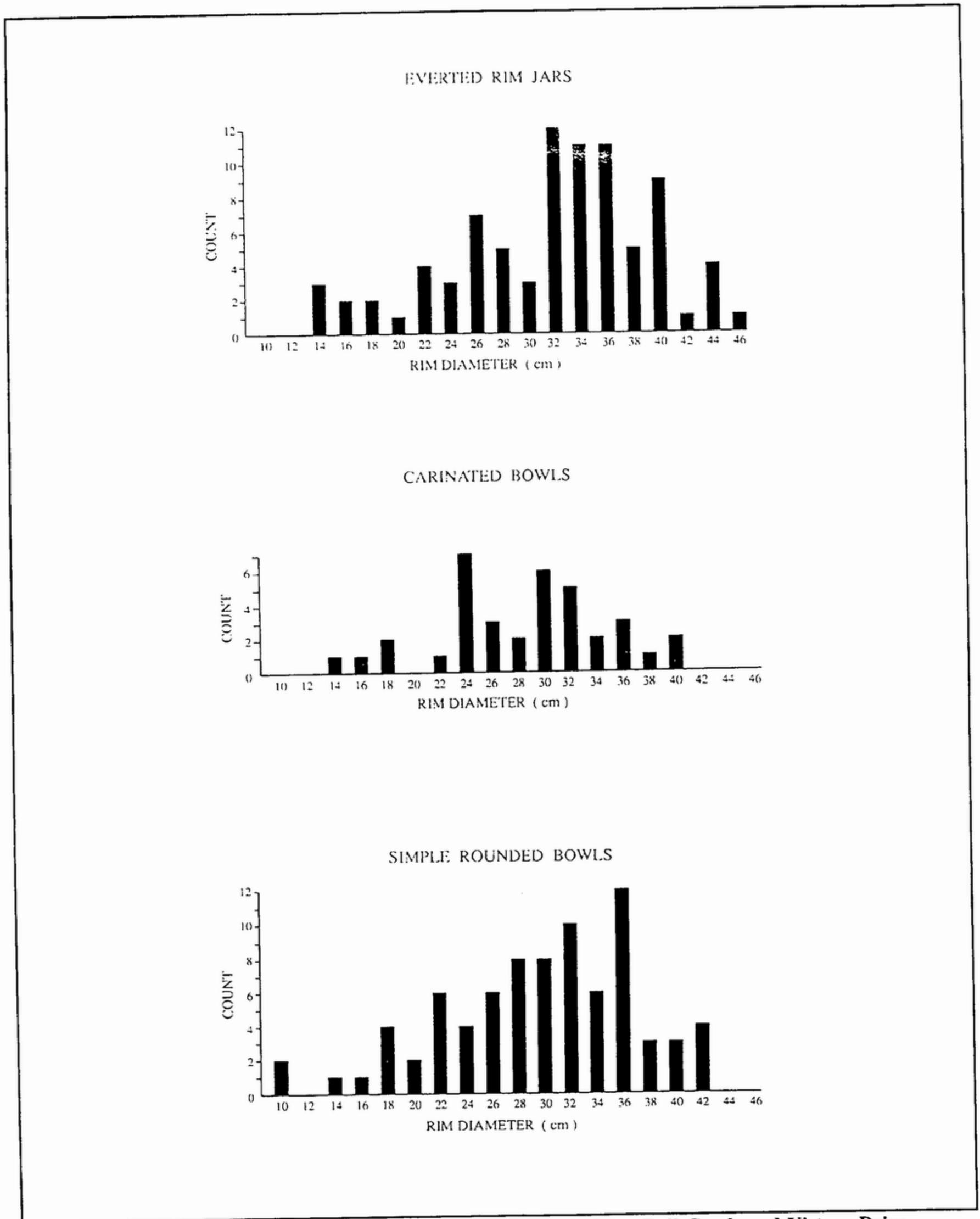


Figure 136. Graphs showing the range of rim sizes for vessels from Bull Creek and Victory Drive.

All but one of the carinated bowls in this collection are decorated by incising (N = 11) or a combination of incising and zone punctation (N = 24). The style of the decoration is basically Fort Walton. The presence of Lamar bold incising is questionable. Rim shapes vary from rounded to flattened. Modification includes notching (N = 16) and incising (N = 3). Incised rims are from vessels where the incised body decoration extends to the lip of the rim. The rims of seventeen vessels are not modified. At Bull Creek, rim notching occurs on carinated bowls and simple constricted rim bowls but relative proportions are substantially higher in this vessel type.

Rim diameters for carinated bowls occurs in sizes from 14 to 40 cm but there are some indications that some sizes were more common (see Figure 136). Almost twenty percent of the vessels measure 24 cm in rim diameter. A second peak is evident at 30 to 32 cm (30.6 percent of all carinated bowls).

The size distributions of carinated bowls at Bull Creek are similar to that shown for the Late Lamar Barnett Phase (Hally 1986:275). Hally suggests that carinated bowls were used to cook and serve food that was of liquid consistency and would require a minimum of cooking. Small and large sizes of carinated bowls reflected the quantities of food prepared (Hally 1986:288-289). This vessel type was widely distributed in the midden and trash pits at the Bull Creek site. At least some examples of the vessel type were found on the floor of Lester's second structure.

Collared Globular Bowls (N = 2) are represented by two examples from Bull Creek. The most complete example was found in a trash pit near Lester's Structure 1 (see Figure 135). The vessel form may be described as a deep globular bowl with incurving walls which constrict at the base of a short neck or collar (Willey 1949:498). The previously illustrated vessel is plain with a rim diameter of 26 cm. The rim is unmodified. The second vessel is

check stamped with a slightly rolled rim and a rim diameter of 36 cm. These bowls may have been used as cooking or serving vessels.

Simple Rounded Bowls (N = 80) occur with essentially the same frequency as jars. The category includes any bowl with a constricted orifice. In some cases the rim is only slightly incurving. This category is distinguished from other simple bowls that slope outward at the orifice.

Simple rounded bowls were decorated with complicated stamping (N = 34), incising (N = 11), a combination of incising and zone punctation (N = 2) and check stamping (N = 1). The remaining thirty-two bowls were undecorated. Within this collection sixty percent of all vessels are decorated. The percentage of Lamar complicated stamping (42.5 percent) is second only to jars at Bull Creek.

Rim types are highly variable in this vessel category. Fourteen different rim types were identified, including unmodified (N = 33), notched (N = 22), pinched (N = 2), noded (N = 2), rolled (N = 3), incised (N = 1), applied notched strip (N = 2), applied noded strip (N = 1) folded (N = 3), folded and pinched (N = 3), folded and notched (N = 3), and thickened (N = 2). The collection also contains one T-rim and two rims with effigy adornos. Rim diameters range from 10 to 42 cm with two-thirds being greater than 26 cm (see Figure 136). Within this collection, sixty percent of the vessels fall within the range of 28 to 36 cm.

Hally's work with Barnett phase vessels suggests that large rounded bowls, which equate in size to the majority of Bull Creek vessels, were used primarily for preparing and serving large quantities of viscous and solid foods but only minimally for heating these foods. Smaller bowls were used for similar functions but in limited quantities (Hally 1986:289).

Simple Open Bowls (N = 15) refers to vessels for which the widest part of the bowl occurs at the rim orifice. These bowls differ from the previous category primarily in this one attribute (see Figure 136).

Decoration for open bowls includes complicated stamping (N = 5), incising (N = 1), and combined incising and zone punctation (N = 1). The remaining eight bowls are plain. Rims are generally unmodified (N = 6), or thickened (N = 3). Variations include thickened and L-shaped (N = 2), and lug handles (N = 1).

The range of rim diameters of 10 to 42 cm is similar to other vessel types from the site but unlike the other types there are indications of size groupings (see Figure 136). The smaller vessels, which range in size from 10 to 24 cm include one small vessel from Burial 18, which may be a specially produced mortuary vessel. This small bowl, only 10 cm in diameter, is crudely decorated with a Fort Walton zone punctate design (see Figure 135). That bowl's combination of diminutive size, sloppy decoration and even vessel shape is unique in the site collection. A second small bowl was also recovered from the cemetery, but that vessel has been lost and was not adequately described in the field notes.

The small bowls include three plain, two incised, and three complicated stamped vessels. Rims are variable but primarily unmodified (N = 4). The larger bowls either are plain (N = 4) or complicated stamped (N = 2) with thickened or L-shaped (N = 3), plain (N = 2), or notched (N = 1) rims. The one isolated vessel at 28 cm is a slightly flaring rim bowl with interior lip incising. Aside from mortuary use for the one example, the differences in sizes may reflect uses similar to large and small varieties of simple rounded bowls.

Table 40. Measurements of effigy bottles from Bull Creek.

Vessel Number	Burial No.	Height (cm)	Length (cm)	Width (cm)	Orifice Diameter (cm)
V. 117	3	26.5	30.0	19.0	9.5
V. 118	7	27.0	27.5	19.5	9.5
V. 119	16	32.0	28.0	18.0	8.0

Bottles from the Bull Creek site consist entirely of mortuary vessels. Water bottles similar to the category are illustrated by Scarry in Fort Walton context (Scarry 1985).

This category includes three bottles commonly known as the Bull Creek cemetery dog pots. Figure 137 shows the three vessels from Bull Creek and a very similar example from the Neisler site on the Flint River at the same scale for comparative purposes. The three vessels from Bull Creek and the one vessel from Neisler Mound are considered the only known examples of this one type of negative painted dog effigy vessel (Schnell 1990:67). Selected measurements for the three vessels are shown in Table 40.

Other Ceramic Objects

A few examples of ceramic pipes and pottery discs have also been recovered from Bull Creek, but were quite rare in the collections. The low counts of pipes appear to be an accurate reflection of the scarcity of the artifact type on the site, but there is some contradiction with respect to pottery discs. Chase noted "pipes are infrequently found at Bull Creek, only three stems and one bowl fragment came to light but hundreds of pottery discs and one of stone appeared. This is not surprising since the discs prevailed from earliest Lamar times into historic period" (Chase 1957).



Figure 137. Illustrations of dog pot vessels from Bull Creek (A-C) and Neisler Mound (D).

Our reexamination of the collections produced two complete pipes from the cemetery excavations and four fragments from the village midden. Of this total, two were recovered from the pit excavated in 1981 (Ledbetter 1995c:208). We were able to record only six pottery discs from the collections. Of this total four were found in a private collection. With respect to ceramic discs, we are left with the possibilities of an error in Chase's assessment of numbers or the actuality that discs were commonly found only in the portions of the site examined by Chase and Fuller. Pottery discs from Bull Creek ranged in diameter from 30 to 45 mm. Surface treatment was divided between plain and complicated stamping (Figure 138).

The most complete pipes and pipe fragments found in the surviving collections from Bull Creek are illustrated in Figure 138. The two examples are effigy forms recovered from the cemetery (Burials 17 and 18). Other examples from the collections are more simply fashioned, typical pipe forms, recovered from midden deposits.

Summary

The ceramics examined from all collections from the Bull Creek and Victory Drive sites are dominated by vessels of medium to large size. There is, however, a full range of vessel sizes and a moderate range of vessel forms. The range of sizes and vessel forms should be typical of a Late Mississippian village-level occupation. The vessels represent a mixture of typical Lamar forms and typical Fort Walton forms which is again in line with expectations based upon previous research. The most common Lamar form is the everted "pinched" rim jar with complicated stamping. The typical Fort Walton vessel is the carinated bowl with incising or zone punctations. In the collections examined, complicated stamping is Lamar but

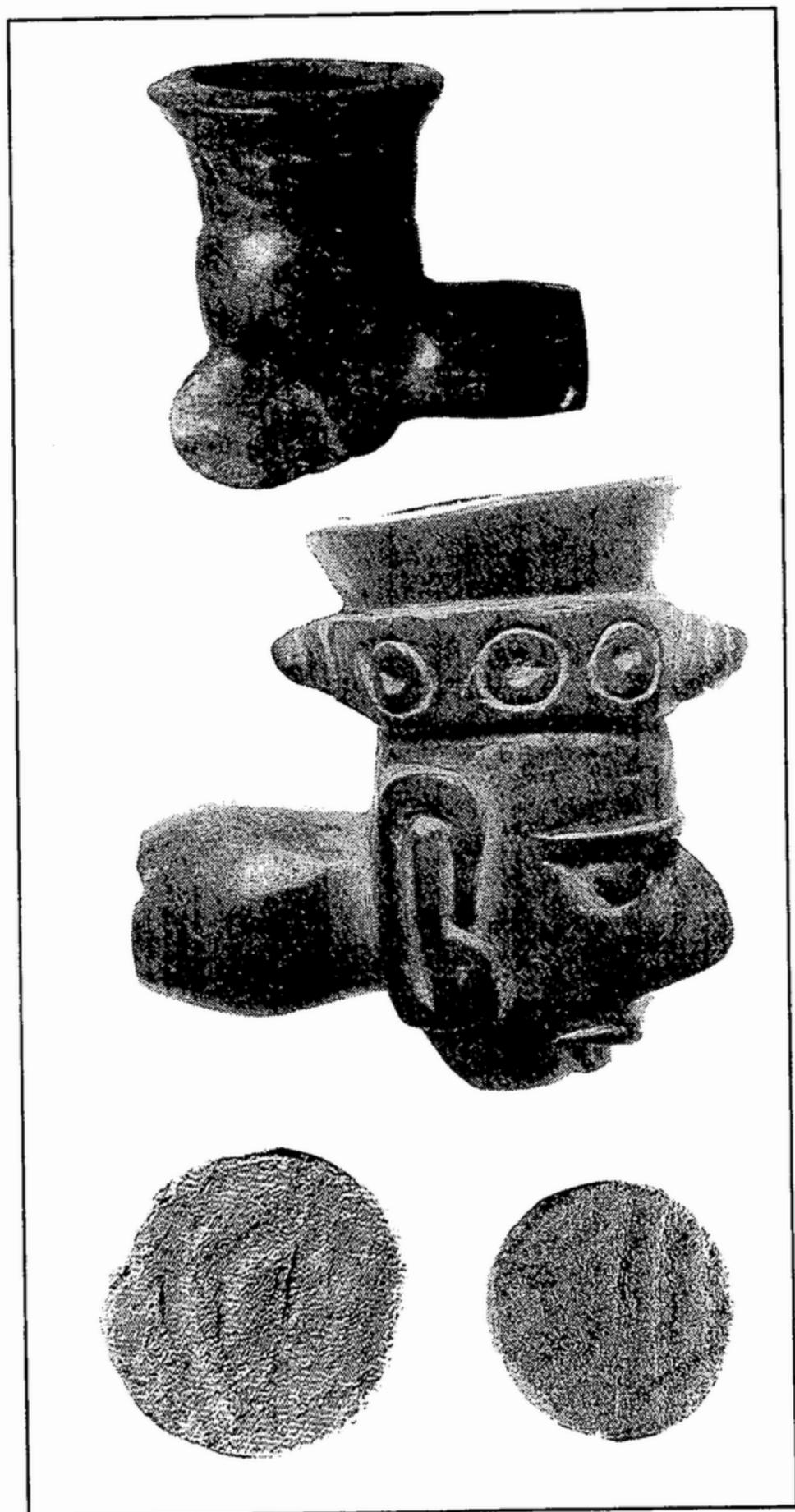


Figure 138. Examples of ceramic pipes and pottery discs from the Bull Creek site.

incising appears to be predominantly Fort Walton. The remaining ceramic objects on the site consist primarily of pottery discs and smoking pipes.

Historic Creek Pottery

During much of the eighteenth and early nineteenth centuries, the Victory Drive site and the surrounding broad terrace lands of the Chattahoochee River valley were occupied by Indians identified with the Lawson Field phase. The ceramic makeup of the phase is well defined as a result of Willey's initial work at the Lawson Field (Kasita) site on Fort Benning (Willey and Sears 1952). Recent research, which is especially relevant to characterization of Lawson Field phase pottery is found in Mistovich and Knight (1986) and Knight (1994). Lawson Field pottery assemblages are best identified by the presence of brushed or roughened sherds, fine line incised wares and associated eighteenth and nineteenth century Euro-American manufactured artifacts.

While brushed and incised pottery may be the most diagnostic indicators, there are actually a number of pottery types associated with the Lawson Field phase. Table 41 lists the pottery types commonly found on Lawson Field sites according to Knight (1994:189). The list includes pottery with distinctive surface treatments that are further separated as types and varieties based on temper.

Table 41. List of pottery types associated with the Lawson Field phase (taken from Knight 1994:189)

sand-tempered plain
sand-tempered burnished plain
Walnut Roughened, <i>var. McKee Island</i>
sand-tempered incised
nonsand-tempered plain
nonsand-tempered burnished plain
Chattahoochee Roughened <i>var. Chattahoochee</i>
Chattahoochee Roughened <i>var. Wedowee</i>
Lamar Incised, <i>var. Ocmulgee Fields</i>
Mission (Kasita) Red Filmed
Lamar Complicated Stamped
Toulouse Plain
Toulouse Incised

Information presented in a second table provides sorting criteria for these types and varieties (Table 42). The primary attributes for distinguishing the historic aboriginal pottery types for the region is adapted from the report by Mistovich and Knight (1986).

Examples of all pottery types recognized by Knight for the Lawson Field phase were not recovered from the Victory Drive site. Shell tempered pottery, for instance, is virtually absent from the site. Perhaps five shell-tempered sherds have been identified from all collections of the combined Victory Drive and Bull Creek site excavations. The lack of shell tempering reflects the lateness of the occupation (ca A.D. 1800). The recovery of a few shell tempered sherds, which are more characteristic of earlier historic aboriginal Abercrombie and Blackmon phases, and the Early Mississippian Rood phase, may indicate limited occupation during one of those periods of time. Changes in the frequencies of different pottery types are to be expected from occupations dating early and late in the phase. Several of the pottery types listed by Knight are holdovers from the preceding Blackmon phase. Types such as Lamar Complicated Stamped and all wares tempered with shell diminished in frequency as the phase progressed (Knight 1994:189).

Throughout this report, the more traditional type names have been used when tabulating Lawson Field pottery from the Victory Drive site. Using Knight's types and varieties, the common pottery types recovered from Victory Drive would equate to nonshell-tempered plain and burnished plain (plain grit tempered), Chattahoochee Roughened, *var. Chattahoochee* (Chattahoochee Brushed), Lamar Incised, *var. Ocmulgee Fields* (Ocmulgee Fields Incised), and Mission (Kasita) Red Filmed.

Table 42. Attributes of Historic Aboriginal Pottery Types based on Mistovich and Knight (1986)

SHELL TEMPER (shell or combination of shell and sand)

Plain	Not Burnished	-----residual plain, shell tempered
	Burnished	-----residual burnished plain, shell tempered
Roughened	Brushed	----- <i>Walnut Roughened, variety McKee Island</i>
	Cob Marked	----- <i>Walnut Roughened, variety Spanish Fort</i>
Incised	Not Burnished	-----residual incised, shell tempered
	Burnished	-----residual burnished incised, shell tempered
Noded		----- <i>Fortune Noded, variety Crow Creek</i>
Cord Marked		----- <i>McKee Island Cord Marked</i>

NONSHELL TEMPERED (grit, sand, or grog)

Plain	Not Burnished	-----residual plain, nonshell temper
	Burnished	-----residual burnished plain, nonshell temper
Roughened	Brushed	----- <i>Chattahoochee Roughened, variety Chattahoochee</i>
	Cob Marked	----- <i>Chattahoochee Brushed, variety Wedowee</i>
Incised	Not Burnished	----- <i>Lamar Incised, variety Ocmulgee Fields</i>
	Burnished	----- <i>Lamar Burnished Incised, variety Ocmulgee Fields</i>
Painted	Red Filmed (not zoned)	----- <i>Mission Red Filmed, variety unspecified</i>
Stamped	Check Stamped	----- <i>Leon Check Stamped, variety unspecified</i>
	Complicated Stamped	----- <i>Lamar Complicated Stamped, variety Curlee</i>

TEMPERLESS

Plain	----- <i>Toulouse Plain, variety unspecified</i>
Incised	----- <i>Toulouse Plain, variety unspecified</i>

A substantial number of Lawson Field phase sherds have been recovered from four large trash pits excavated at Victory Drive during the past four decades. Additional sherds have been recovered from surface and plowzone collections made during the Riverwalk Project investigations as well as the WPA investigations at the adjacent Bull Creek site. The inventories of surviving collections presented throughout this report contain more than 4,000 probable Creek sherds. Based upon the best procured collection which consists of 1,152 Creek sherds from Feature 2 excavated by SAS, the pottery type frequencies consist of Chattahoochee Roughened, *var. Chattahoochee* (64.5 percent), burnished plain (27.8 percent), nonburnished plain (4.3 percent), Lamar Incised, *var. Ocmulgee Fields* (2.3 percent), and Mission (Kasita) Red Filmed (1.0 percent).

Because most traits of Lawson Field phase ceramics have been comprehensively researched and described in detail elsewhere (see Mistovich and Knight 1986, Knight 1994), our examination will focus upon site specific issues. One meaningful issue is a comparison of vessels from three Creek households as reflected in the contents of the pits previously excavated in the Go-Kart and Dolly Madison areas and the feature excavated by SAS during the data recovery phase (Figure 139). This may be accomplished by examination of traits represented by minimum vessel counts.

The four pits associated with these three households produced a combined count of 98 vessels. This represents the minimum number of vessels (MNV) based on distinctly different rims. Because most of the rim sherds from these vessels were large or could be mended, major portions of most incised patterns or motifs were often definable. The illustration and tabulation of incised motifs from these collections

may be valuable to future research as comparable studies are accomplished on other sites in the region.

A substantial portion of the minimum vessel count was found in the Dolly Madison feature. A total of 59 vessels was recovered from that pit. The SAS Feature 2 produced a minimum of 22 vessels. The two pits excavated on the Go-Kart site produced a total of 17 vessels. There is a possibility that the Go-Kart collections are not complete. Based on lower pottery counts and vessel frequencies compared to the other pits and inferences drawn from the original newspaper accounts of the excavation which suggest substantial amounts of pottery, the Go-Kart material curated at the University of Georgia may be only a portion of the sherds originally excavated from those pits.

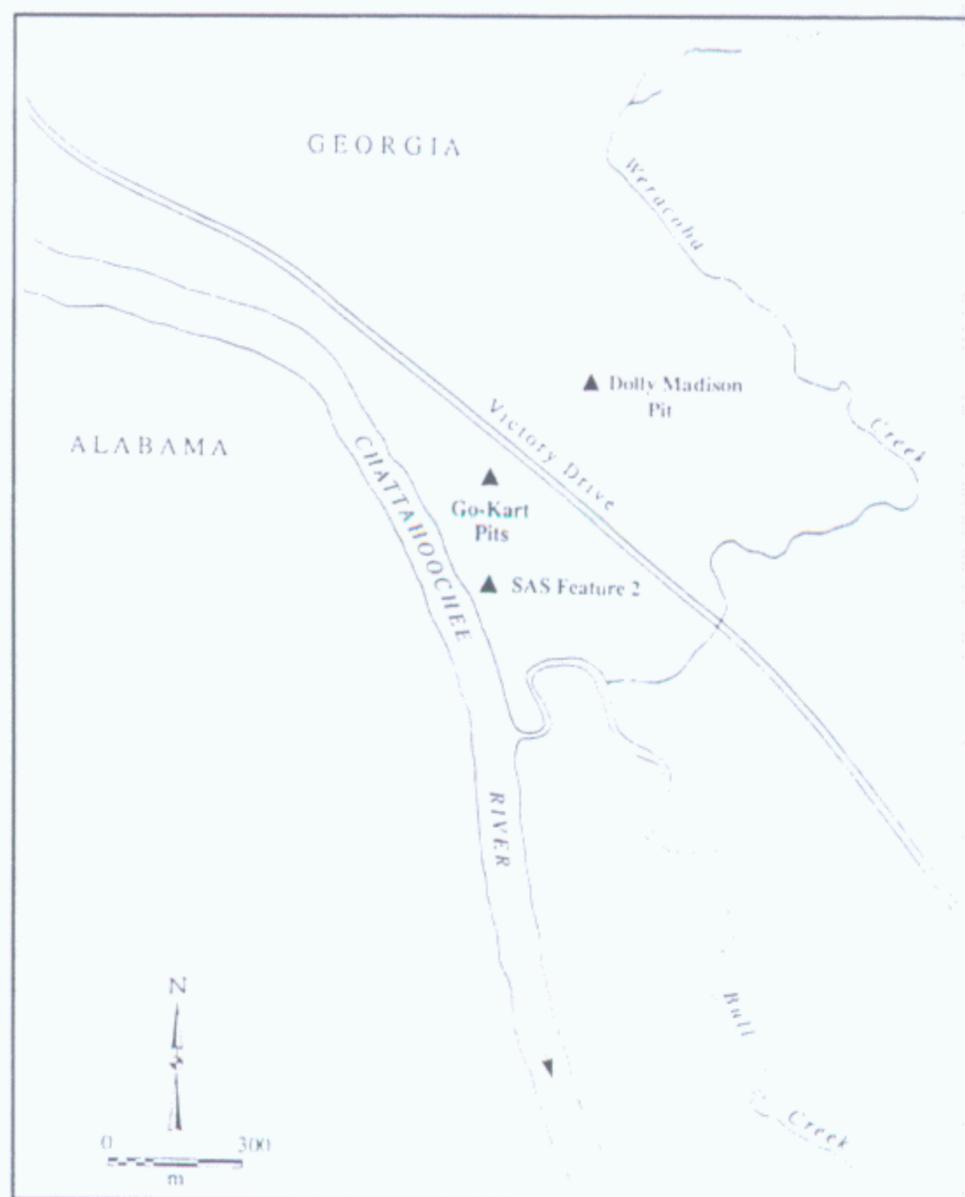


Figure 139. Locations of excavated Creek pits on the Victory Drive site.

Lawson Field Phase Vessel Forms

The Creek vessels found at Victory Drive display continuity with styles of the Late Mississippian period. Generally only minor variation appears between Lawson Field vessels and those of the earlier Bull Creek phase discussed previously. Figure 140 illustrates vessel forms typical of Creek assemblages from sites throughout the southeast. The vessel outlines are taken from a study by John M. Goggin conducted nearly half a century ago (Goggin 1950).

The Victory Drive site vessels were sorted into six categories. The categories consisted of flaring (everted) rim jars, bottles, large shallow bowls, simple open bowls, casuelas, and small cup like vessels. The last category includes a stemmed, goblet-like vessel. Profile drawings, descriptions of surface treatment, rim types, and measurements of rim diameters are presented for each vessel in Appendix A. Figure 141 illustrates both typical and rarely encountered surface types found on the vessels. Included are two uncommon types of surface treatment for the site, cob marking and engraving. Figure 142 illustrates typical rim types found on the vessels.

Flaring (Everted) Rim Jars. This category contains slightly more than half of all vessels. The category is comparable to the everted rim jar from the Bull Creek phase collections from the Victory Drive and Bull Creek sites. Lawson Field phase jars account for a higher percentage of vessels compared to the Bull Creek assemblage (38 percent).

Rim diameters range from 18 to 48 cm. The Lawson Field phase jars are generally comparable in size to Bull Creek phase jars although the percentages of large

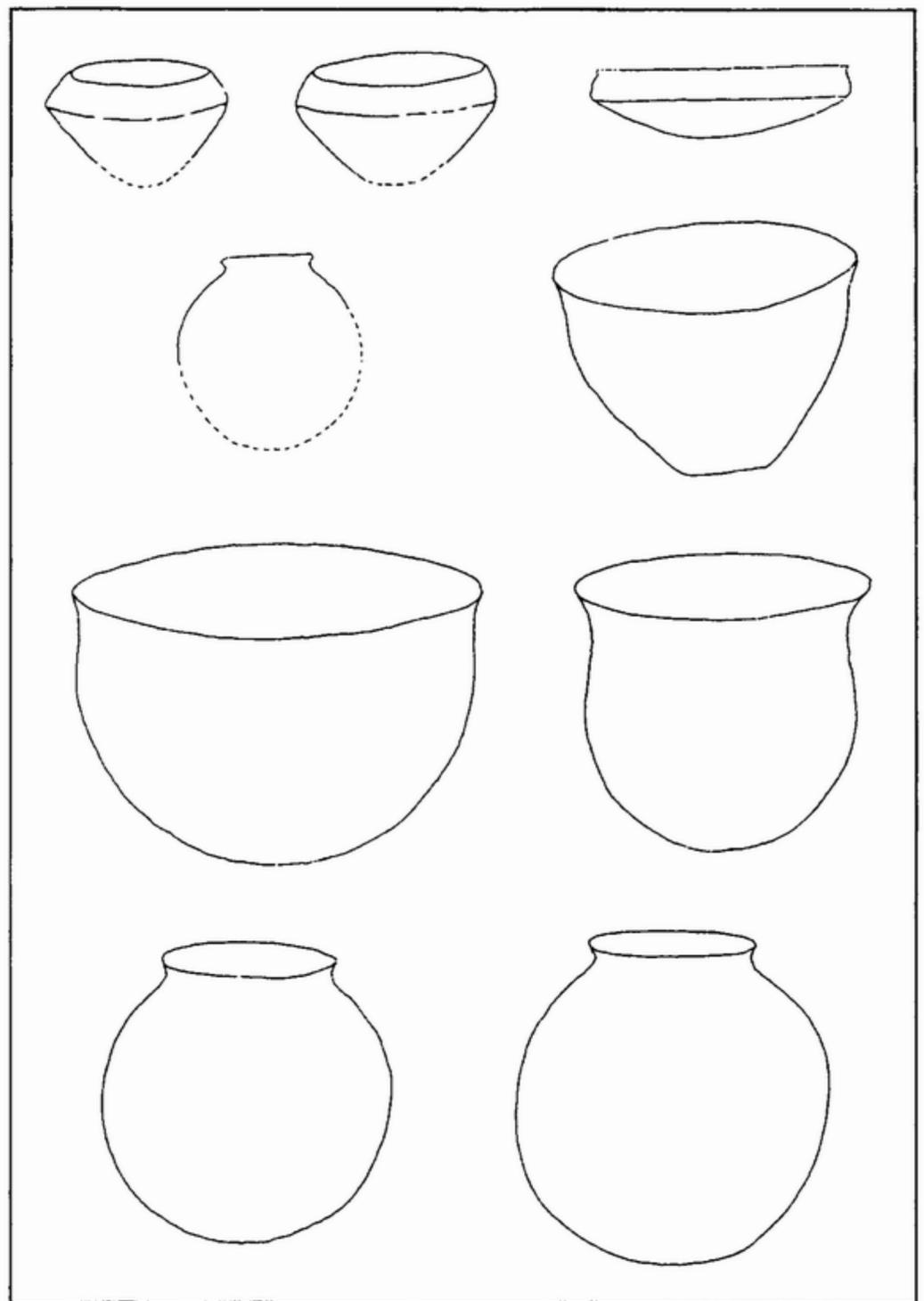
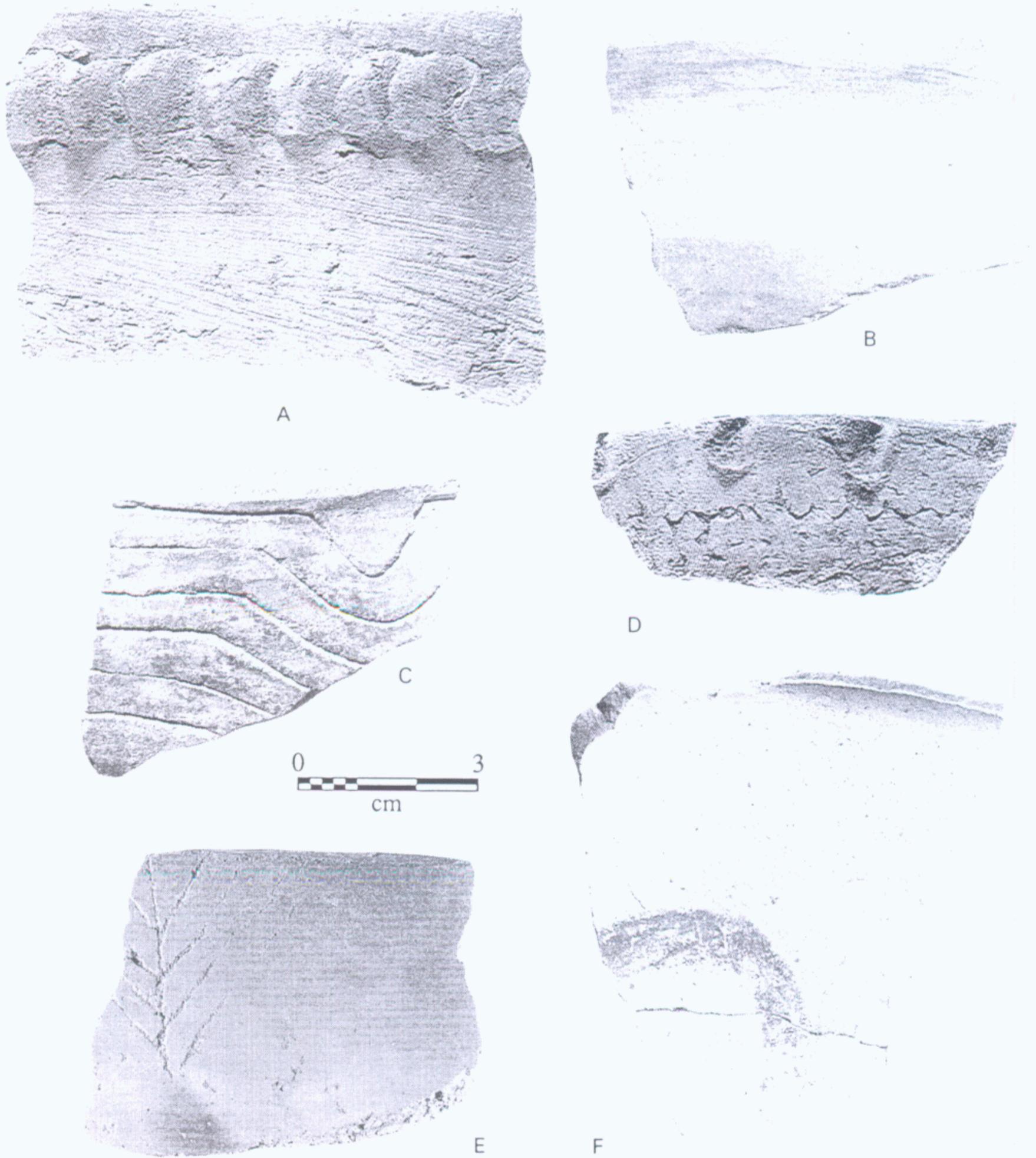


Figure 140. Outlines of various Creek vessel forms (redrawn from Goggin 1950:Figure 11).

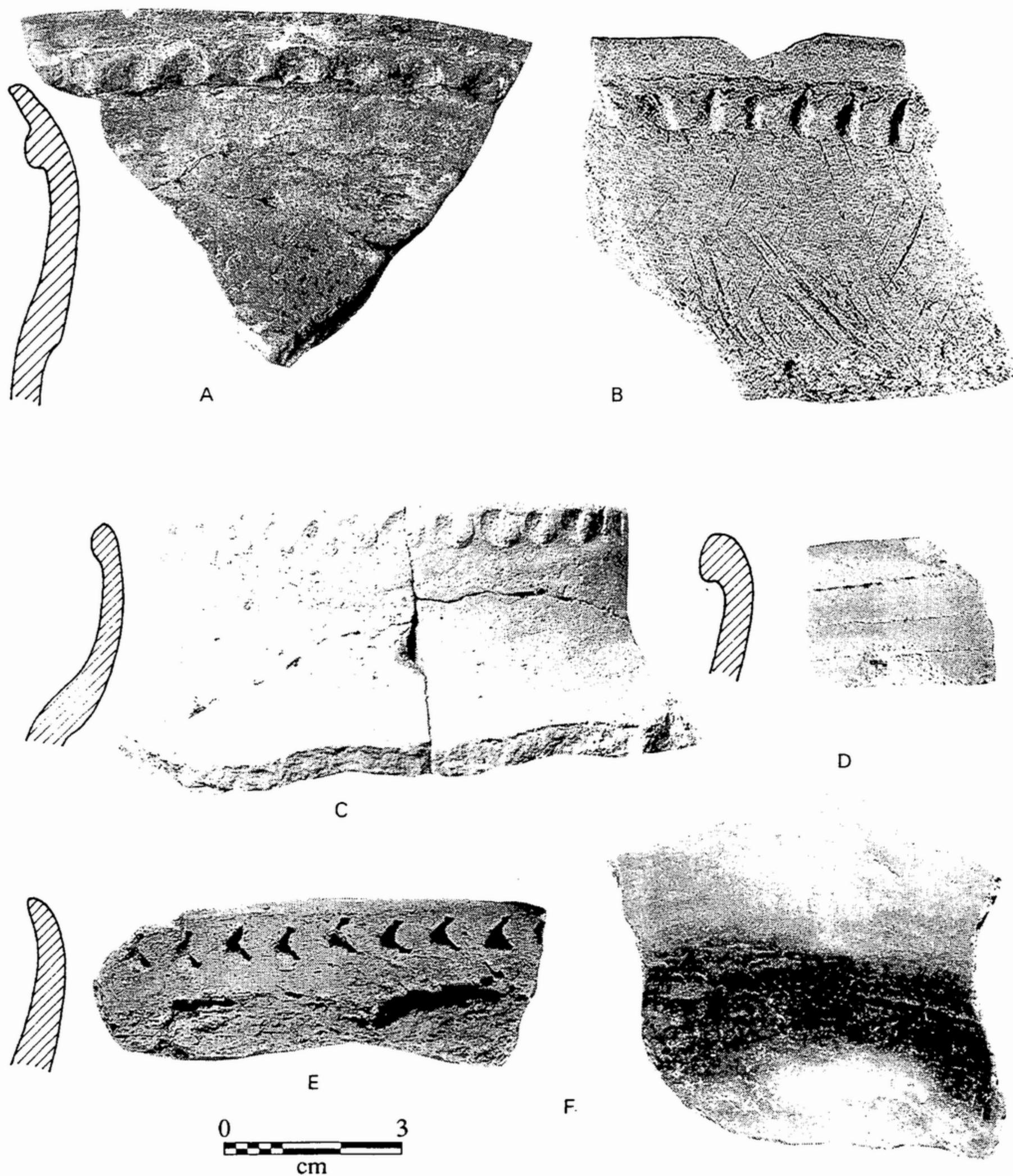
versus small jars are somewhat different. Lawson Field phase jars are nearly evenly divided between large (> 30 cm diameter) and smaller vessels compared to a predominance of larger vessels (63.9 percent) in the Bull Creek collections.

On flaring rim jars, the orifice diameter is often as wide as the maximum diameter of the jar body although a small proportion of jars have pronounced constricted openings (see Appendix A). Figure 143 shows several jars from the Victory Drive site to illustrate the variability in vessel style.



*A, brushed (Vessel 87); B, burnished plain (Vessel 61); C, fine incised (Vessel 64);
D, cob marked (Vessel 85); E, engraved (Vessel 92); F, red filmed (Vessel 75)*

Figure 141. Surface treatments identified on Lawson Field phase vessels from the Victory Drive site.

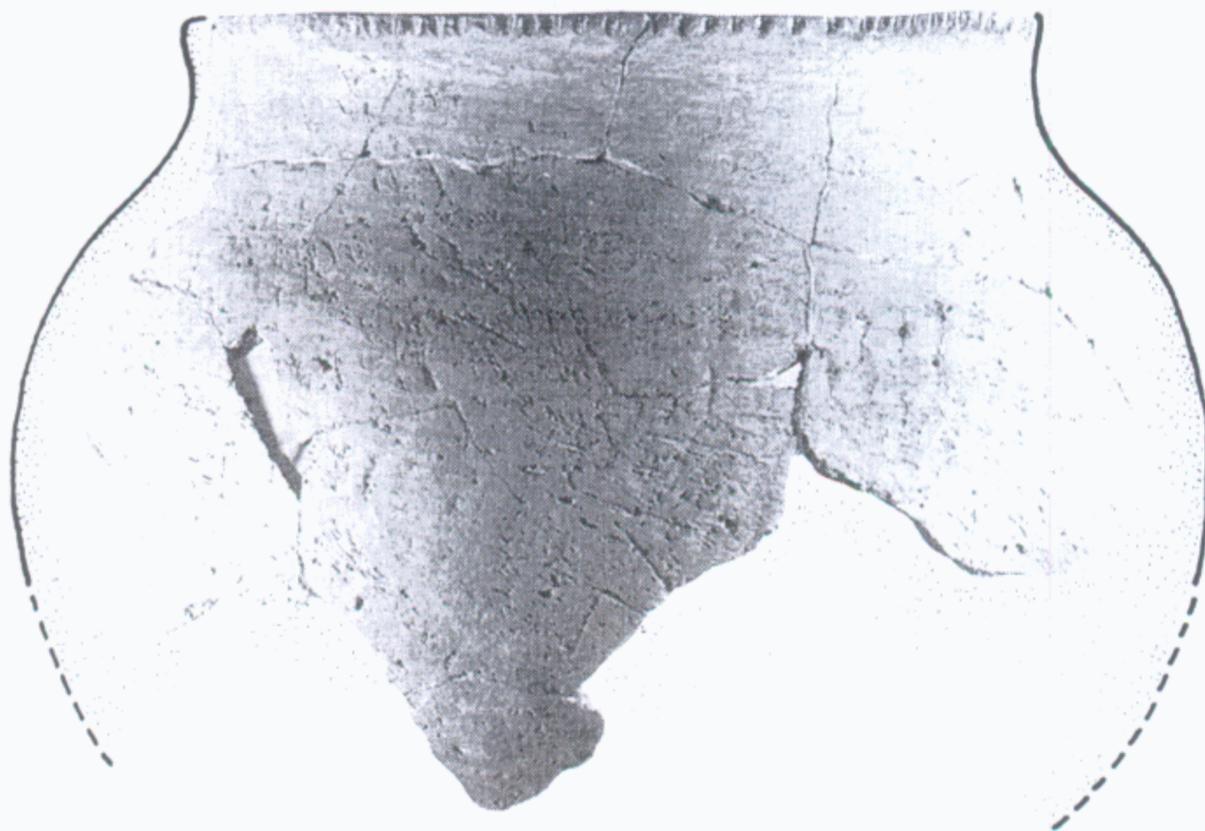
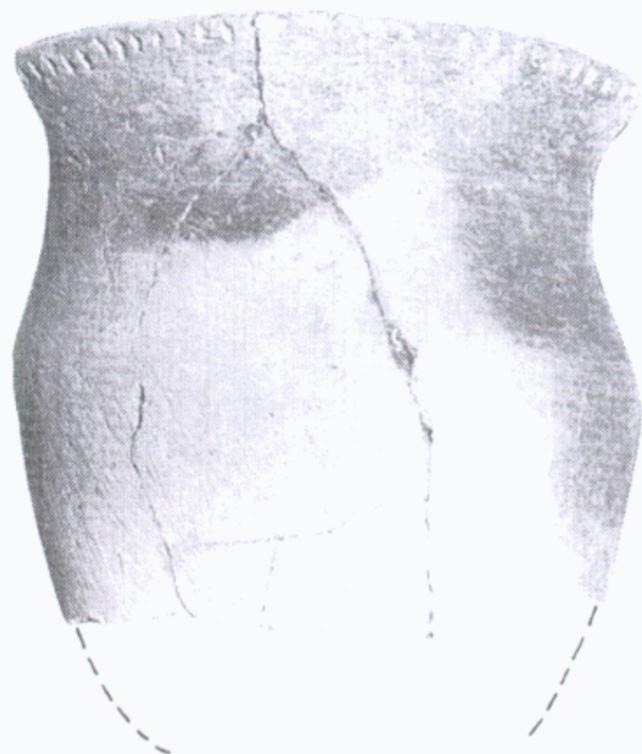


A and B, flaring rims with applied, pinched strip (Vessels 76 and 90); C, thickened pinched rim (Vessel 69); D, folded rim (Vessel 95); E, flaring rim with punctations (Vessel 84); F, rim flange (Vessel 27)

Figure 142. Rim types identified on Lawson Field phase vessels from the Victory Drive site.

Vessel 81

Vessel 8



Vessel 70

Vessel 72

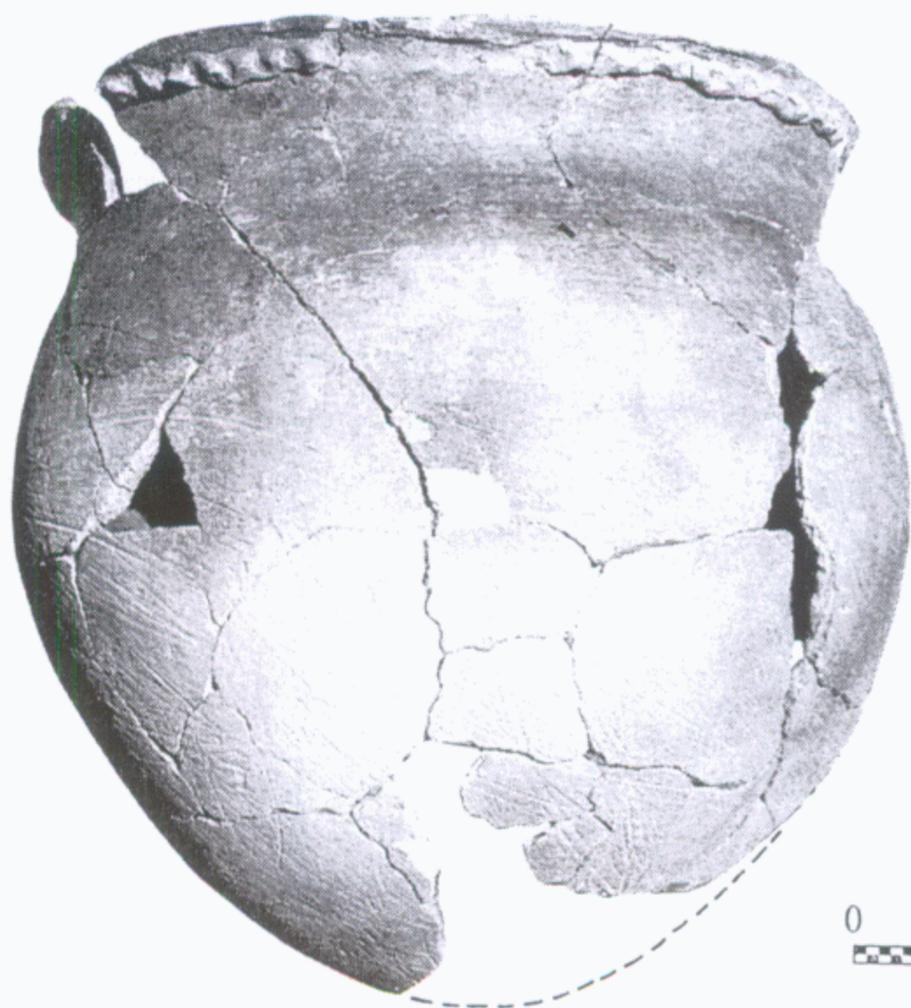


Figure 143. Illustrations of variable styles of flaring rim jars from the Victory Drive site.

The Lawson Field phase flaring rim jars are predominantly decorated (96.1 percent). Of the total vessels, 94.1 percent are brushed. Two vessels have plain exteriors and one (see Figure 141d) appears to be cob impressed.

Rim modification most often consisted of an applied pinched strip below the rim. Two-thirds ($N = 34$) of all jars have an applied and pinched rim strip. One jar exhibits an applied strip that is notched. The remaining rims either are plain ($N = 2$) or exhibit some form of punctation ($N = 9$), notching ($N = 4$), or pinching along the rim ($N = 1$).

In terms of utility, these jars would be expected to have been used in much the same manner as Late Mississippian jars. Large jars measuring 40 cm and larger might have been used for long term storage while medium sized jars were used as general purpose cooking vessels (Hally 1986:285-286).

Bottles. This category includes only three examples. Two bottles were recovered from the SAS feature and one from the Dolly Madison pit. The vessel form is comparable to typical utilitarian, Fort Walton style, bottle forms of the Mississippian period (Scarry 1985). Although no utilitarian forms were found in the Bull Creek phase collections, effigy bottle varieties were recovered from Bull Creek phase burials.

One of three recovered vessels was partially restored (Figure 144). The maximum diameter of that vessel is 26 cm. The height is estimated to be greater than 25 cm. The neck of the bottle is 5 cm in length with an orifice diameter of 8 cm. Rim diameters of the remaining two bottles are 9 and 10 cm.

The Lawson Field phase bottles are undecorated except for rim modification. Of the three bottles, two have modified rims.

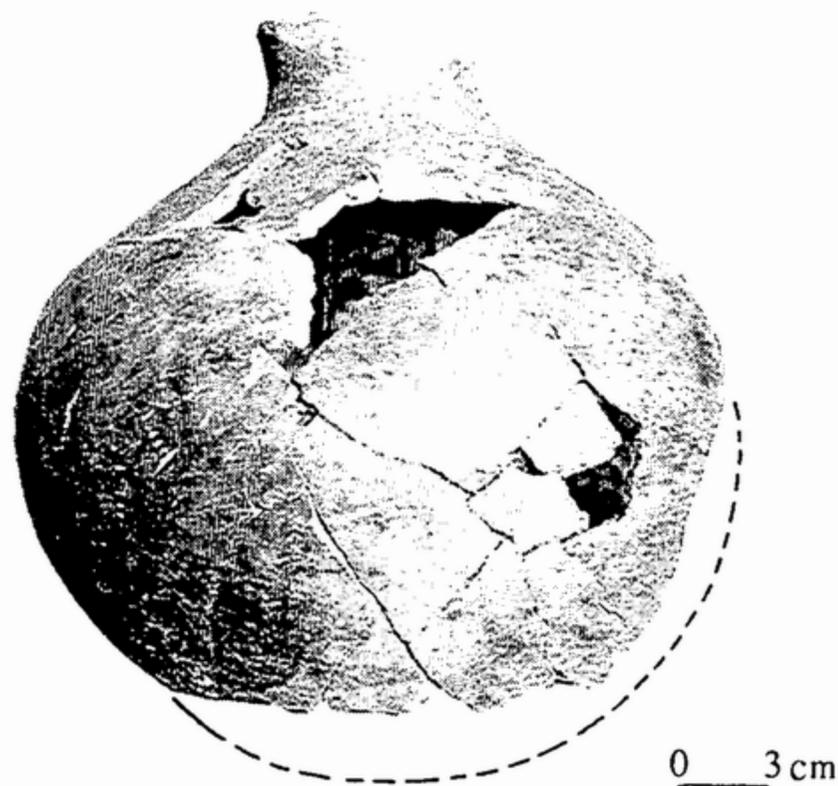


Figure 144. Photograph of bottle from SAS Feature 2 (Vessel 68).

The illustrated example exhibits a notched rim. The second bottle from the SAS feature exhibits a pinched rim.

In terms of function, these vessels would be expected to have been used as containers of liquids. The rim diameters of the three bottles are similar suggesting similar volumes for the containers.

Large Shallow Bowls. This category consists of rim sherds from four large vessels. Rim diameters range from 36 to 42 cm (average 39.5 cm). Two vessels are brushed and two are plain. Each exhibits an applied pinched strip below the rim. The rim sherds exhibit rather straight profiles from rim to shoulder, at which point the vessels appear to bend sharply inward (Figure 145). This would appear to indicate a shallow bowl form rather than a large pot which should be deeper than wide. While the sherds do not include the lower portions of the vessel, the shoulder curvatures do not appear similar to pot profiles.

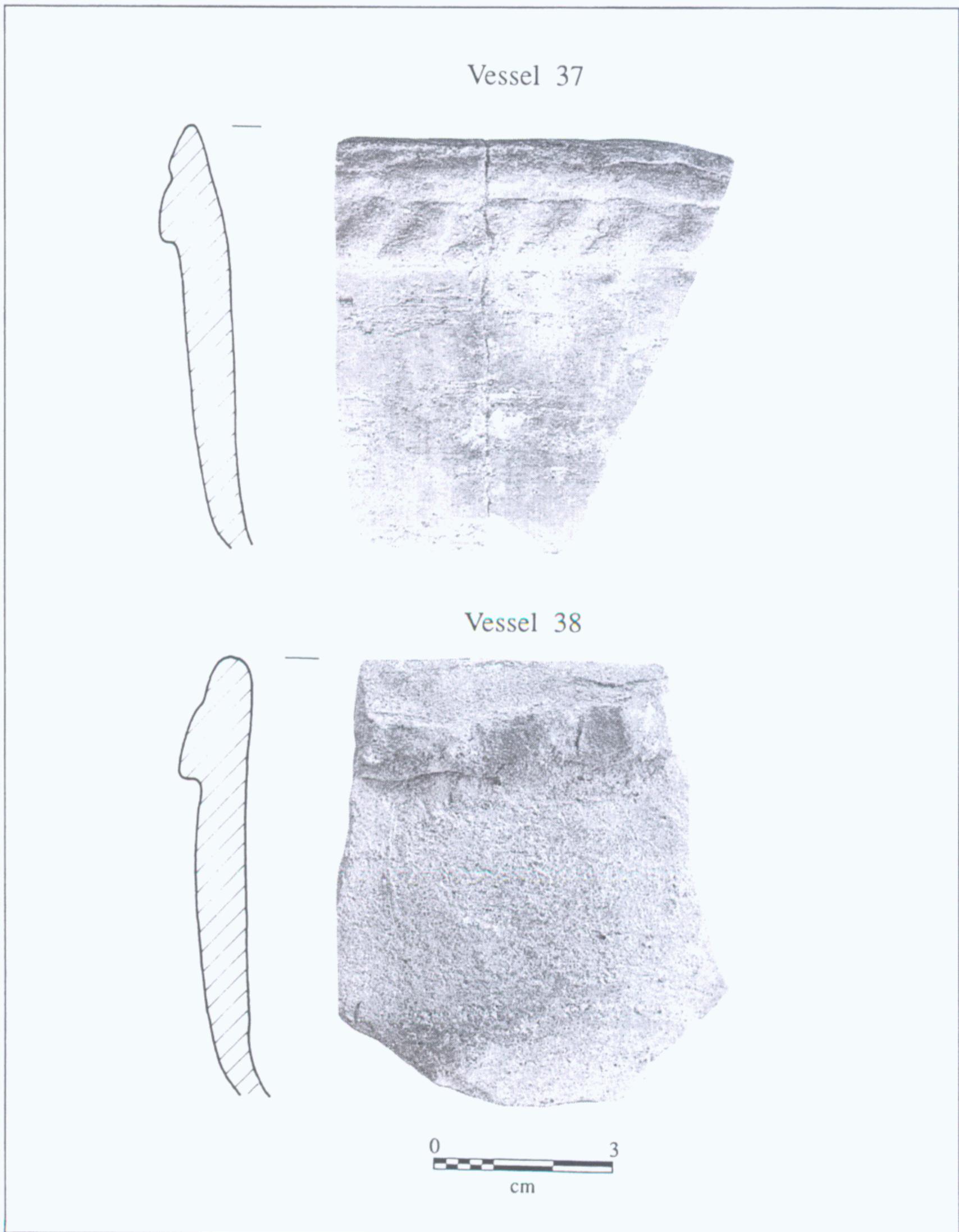


Figure 145. Photographs and profile drawings of rim sherds from large shallow bowls from Lawson Field phase features at the Victory Drive site.

Open Bowls. This category includes 28 vessels recovered from the SAS Feature 2, Dolly Madison and Go-Kart pits. The category is consistent with the category used for the Bull Creek phase (see page 208) and refers to vessels for which the rim orifice approximates the widest part of the bowl. A common variety in the vessels category consists of rounded bowls with slight constrictions below the rim (Figure 146). Other forms flare out conspicuously (see Figure 35) or may be nearly straight-sided.

Figure 147 illustrates the range of variations in vessel shape.

Exterior decoration for open bowls includes incising (N = 5), brushing (N = 1), and red filming (N = 1). The remaining 21 bowls are plain. Of the plain vessels, 17 are burnished. Three burnished bowls have interior incising. Rims are generally unmodified (N = 15). Unmodified rims may be flaring (N = 10) or simple (N = 5). Modified rims may be thickened (N = 6), rolled (N = 3), or flanged (N = 4).

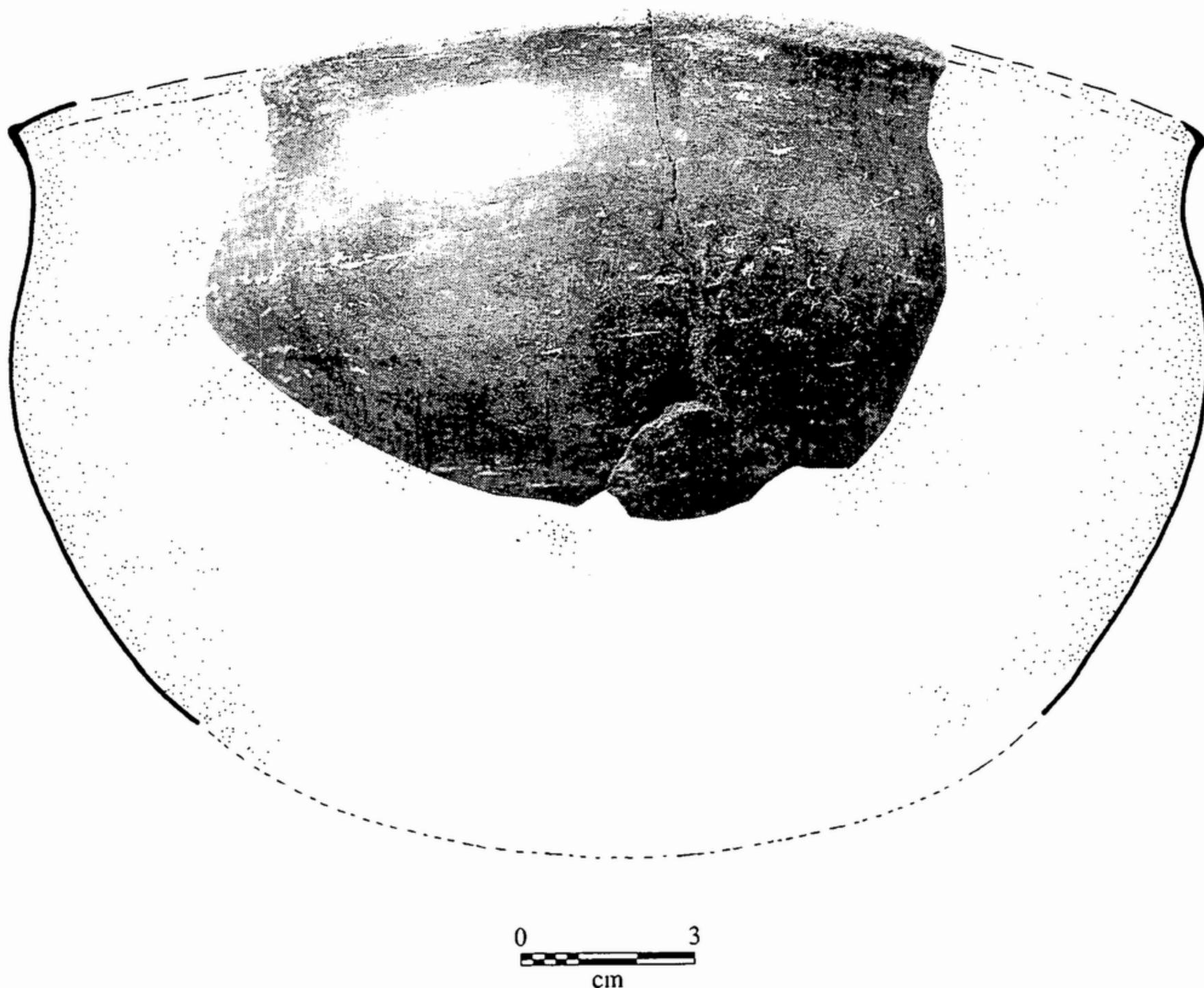


Figure 146. Example of a common open Lawson Field phase bowl form with a slight constriction below rim from the Victory Drive site (Vessel 59).

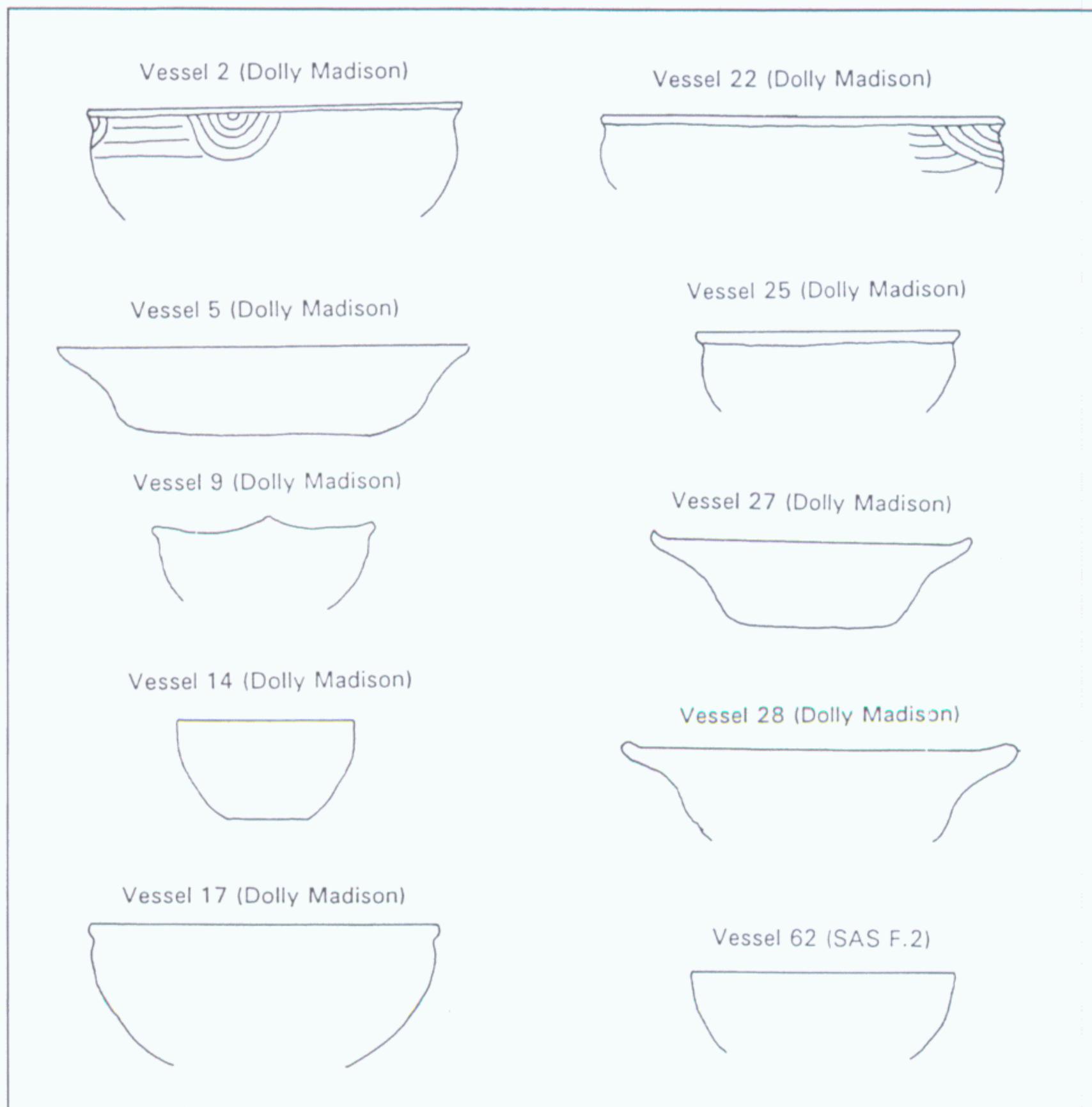


Figure 147. Line drawings illustrating open bowl varieties found in Lawson Field phase features at the Victory Drive site.

Rim diameters of open bowls range from 12 to 32 cm with an average size of 23.6 cm. The relatively small size of most of these vessels would suggest uses other than the preparation or serving of quantities of foods. Instead, the smaller bowls would appear more useful for preparation of limited quantities of food or individual serving (Hally 1986:289).

Casuelas (carinated bowls). Nine examples of carinated bowls were identified from Lawson Field phase pits. Casuelas are defined as constricted rim vessels with a distinct shoulder break, which sometimes forms a well defined projecting keel or carination. The bowls are typically decorated with fine incising not dissimilar from Bull Creek phase vessels.

In the Victory Drive collections, five of the carinated bowls are decorated by incising (N = 11) and one additional vessel is decorated with engraving. The remaining three vessels are decorated with red filming. Rims are generally simple and unmodified (N = 6). Three vessels exhibit thickened rims.

Rim diameters for carinated bowls occur in sizes from 24 to 36 cm with an average of 31 cm. The larger size of this bowl form suggests a different function than

the smaller open bowls of the preceding category. Previous research suggests that carinated bowls were used to cook and serve food that was of liquid consistency and would require a minimum of cooking. Small and large sizes of carinated bowls reflected the quantities of food prepared (Hally 1986:288-289).

Figure 148 illustrates typical profiles of casuelas from the Victory Drive site. The incised motifs will be examined further.

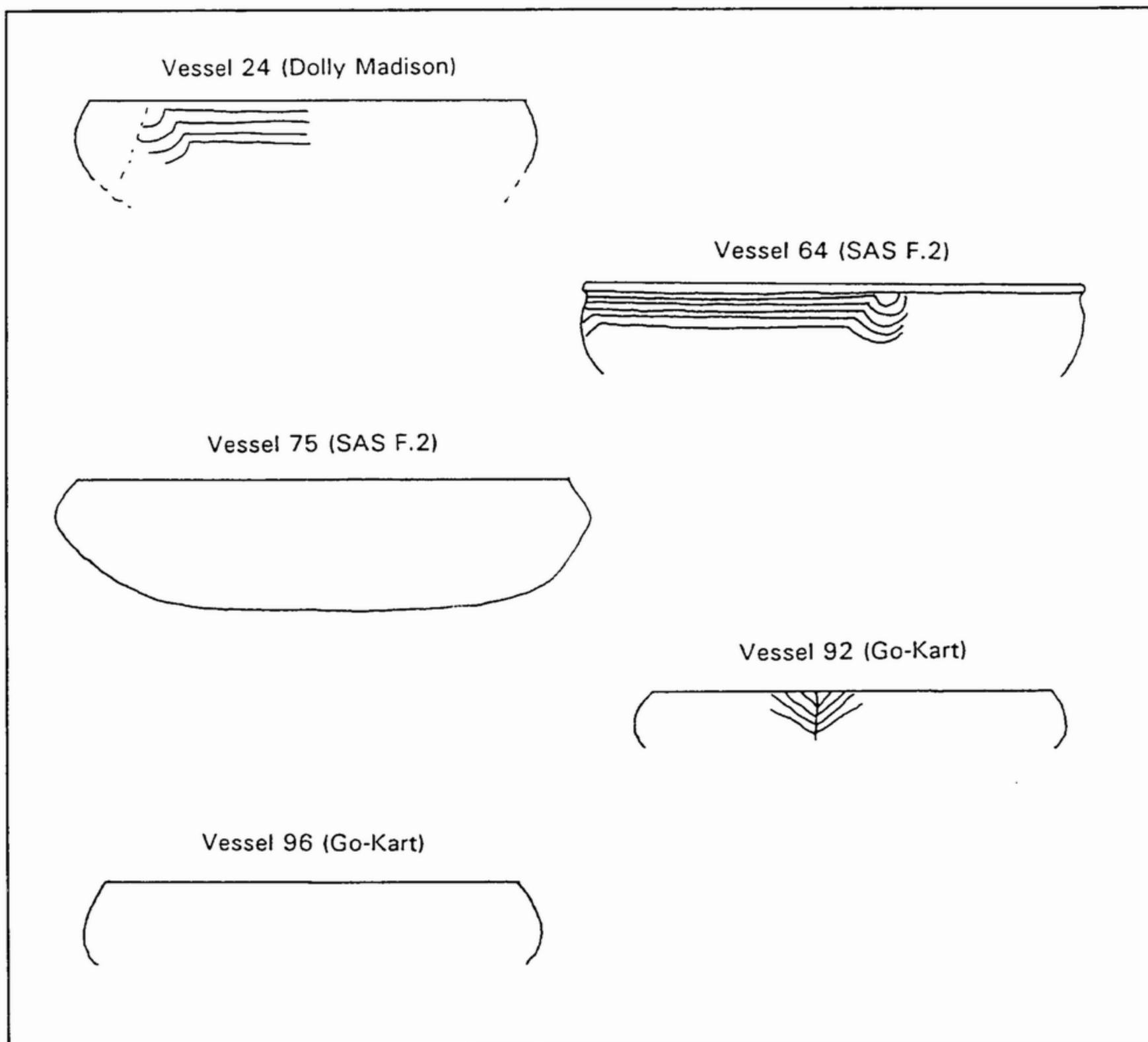


Figure 148. Line drawings of carinated bowls from Lawson Field phase features at the Victory Drive site.

Cups and Goblets. This category includes three diminutive vessels from the Dolly Madison feature (Figure 109). The rim diameters of the three small vessels were 6, 8 and 10 cm. The height of the bowl portions of the vessels ranges from 5 to 7 cm. One example displayed a crudely fashioned stem 2 cm in length. The shape of the vessel may represent an imitation of a glass goblet or grail-like cup.

Vessel rims for this category were simple and slightly rounded. Exteriors of each of the vessels were roughened. Two of the roughened surfaces appeared to be brushed.

Summary and Comparison of Vessel Forms

Counts for each vessel type recovered from the three collection areas of the site are presented in Table 43. The percentages shown in the table represent the proportion of vessel type within the total minimum number of vessels from each collection. The site wide percentages for each vessel type are also shown. Vessels from the three areas are compared with respect to size in a series of graphs shown in Figures 150 through 152.

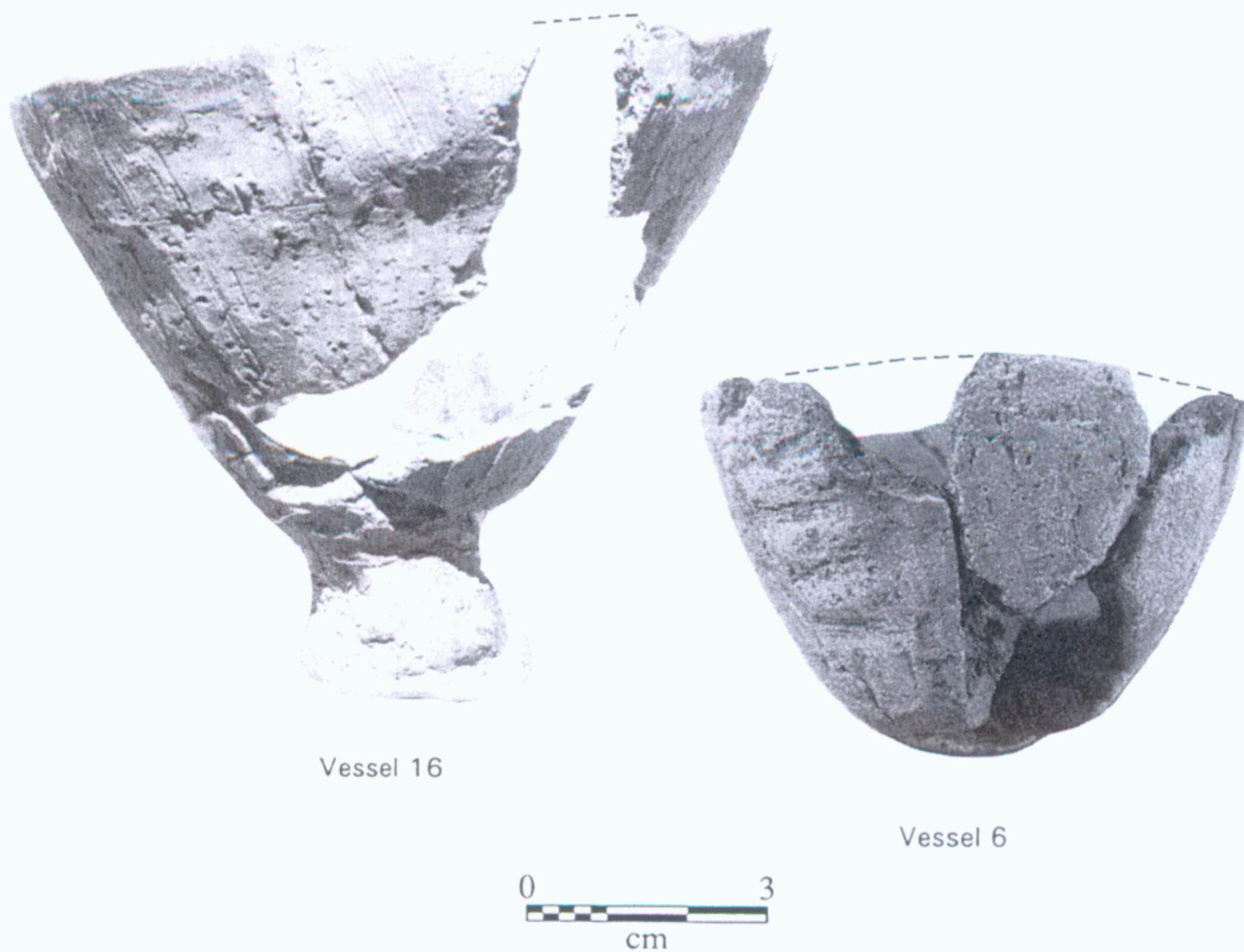


Figure 149. Examples of small cup-like vessels from the Lawson Field phase Dolly Madison pit.

Table 43. Lawson Field Phase Vessel Form Counts from the Victory Drive Site

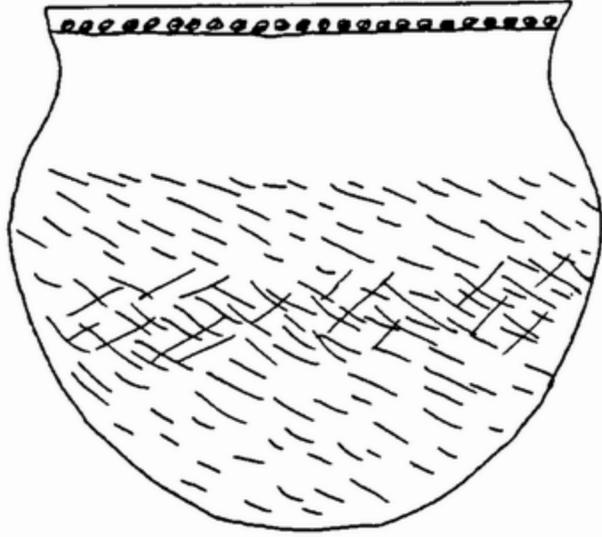
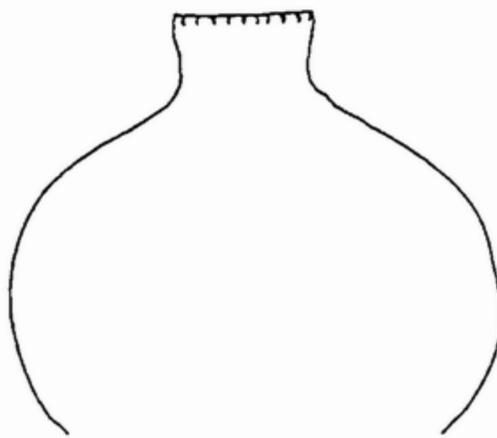
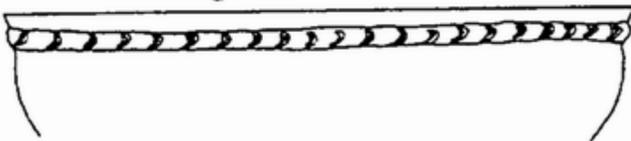
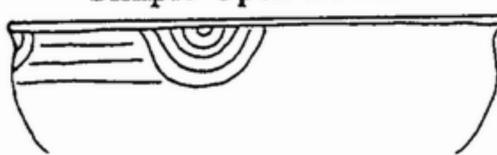
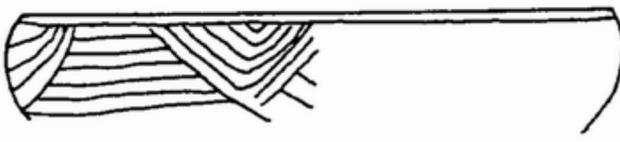
Vessel Type	Feature Counts and Percentages			
	SAS Feature 2	Dolly Madison Pit	Go-Kart Pits	Site Total
<p>Flaring Rim Jars</p> 	Count = 8 36.4% MNV	Count = 32 54.2% MNV	Count = 11 64.7% MNV	Count = 51 52.0%
<p>Bottles</p> 	Count = 2 9.1% MNV	Count = 1 1.7% MNV	Count = 0	Count = 3 3.1%
<p>Large Shallow Bowls</p> 	Count = 1 4.5% MNV	Count = 3 5.1% MNV	Count = 0	Count = 4 4.1%
<p>Simple Open Bowls</p> 	Count = 12 40.9% MNV	Count = 16 27.1% MNV	Count = 3 17.6% MNV	Count = 28 28.5%
<p>Casuelas</p> 	Count = 2 9.1% MNV	Count = 4 6.8% MNV	Count = 3 17.6% MNV	Count = 9 9.2%
<p>Cups/Goblets</p> 	Count = 0	Count = 3 5.1% MNV	Count = 0	Count = 3 3.1%



Figure 150. Comparison of Creek jar diameter sizes from three collection areas of the Victory Drive site.

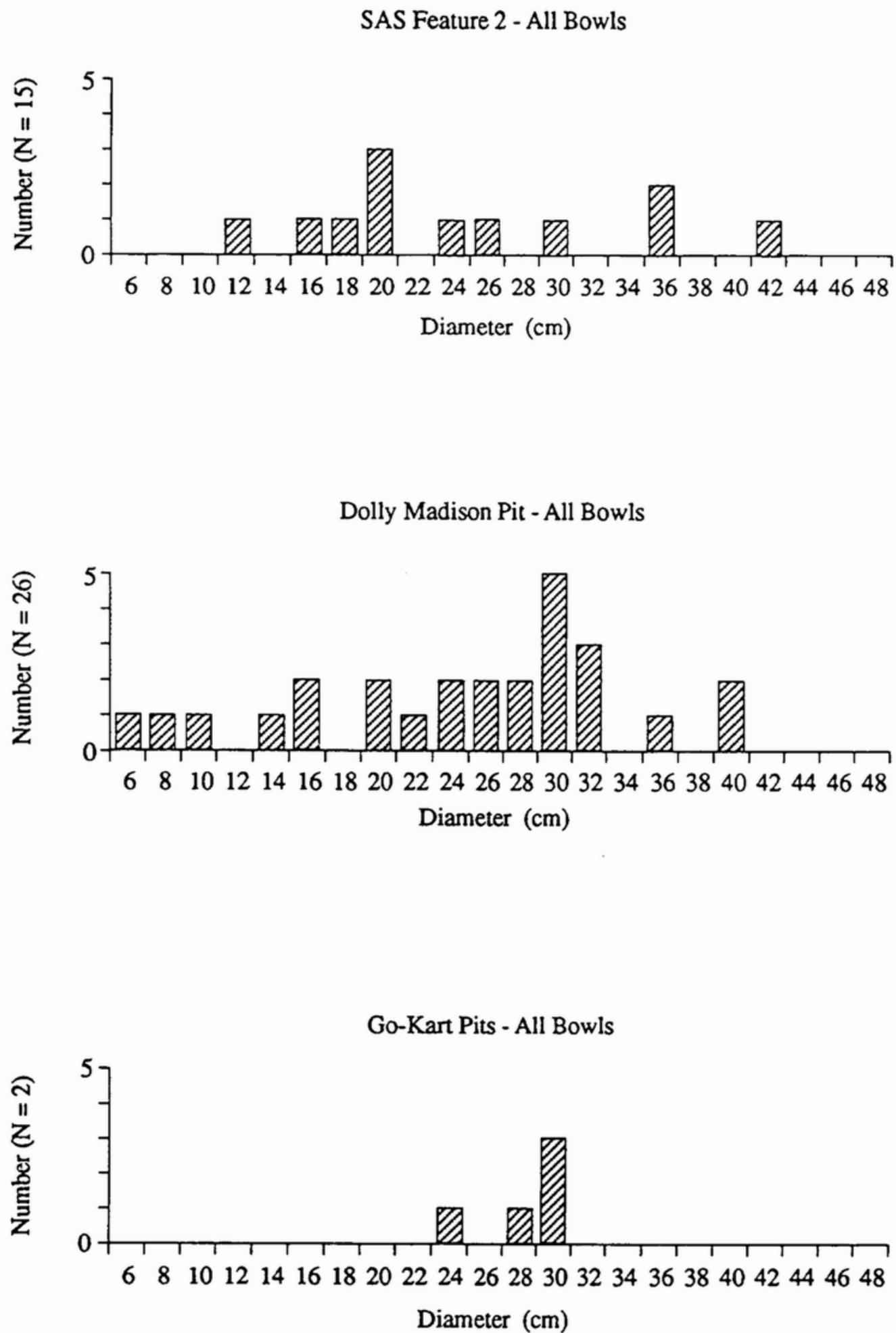


Figure 151. Comparison of rim diameters for all bowls recovered from Creek features at the Victory Drive site.

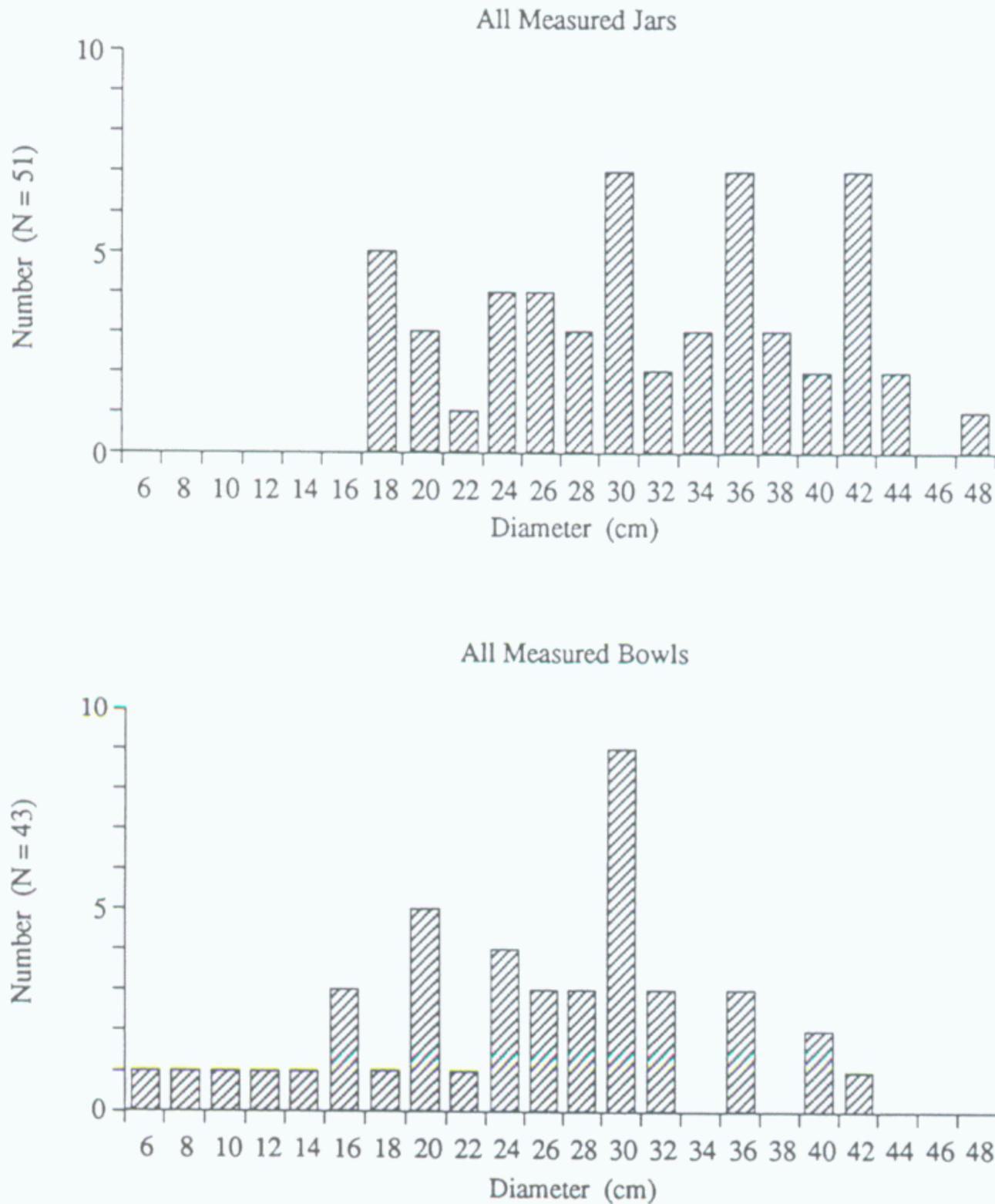


Figure 152. Graphs showing the ranges and counts of all jars and bowls recovered from Creek features at the Victory Drive site.

The figures presented in Table 42 indicate general similarity between the contents of SAS Feature 2 and the Dolly Madison pit. Both features contained a variety of vessel types. Aside from the absence of small cup-like vessels in Feature 2, the primary

difference appears in the percentages of jars and simple bowls. Jars account for more than half of the vessels in the Dolly Madison pit and just over a third of the vessels in the SAS pit.

Simple open bowls account for nearly 41 percent of the vessels in the SAS pit but slightly more than a quarter of the vessels in the Dolly Madison pit. Casuela bowls occur in low but consistent percentages in both pits.

By contrast, the Go-Kart pit contains only three vessel types. Jars account for a high percentage of total vessels (78.6 percent). Simple bowls and casuelas occur in equal frequencies (17.6 percent). As previously noted, there is a possibility that this count represents only a portion of the feature contents and may not be a valid indicator of the contents of the pit.

Rim diameters plotted for jars and combined bowls (see Figures 150-152) illustrate the range of vessel sizes produced within individual households and on a site-wide level. The greatest range of jar sizes occurs in the Dolly Madison pit which also produced the highest number of jars. The smaller collections from the SAS and Go-Kart pits fall within the range of the Dolly Madison pit. For the total site collection shown in Figure 152, there is evidence for a prevalence of certain sizes. Peaks appear at approximately 6 cm intervals at 18, 24-26, 30, 36 and 42 cm.

In terms of bowls, the SAS feature and the Dolly Madison feature display similarities in size ranges. The primary difference lies in the presence of a distinctive vessel type composed of three very small cup-like bowls in the Dolly Madison pit. The extremely small counts from the Go-Kart pit fall within the middle range of the other two features. The Go-Kart bowls lie entirely within a narrow range of 24 to 30 cm with most at 30 cm. Within the total collections there are some indications of the prevalence of certain sizes. As shown in Figure 152, small peaks occur at 16, 20, and 24 cm with a pronounced peak at 30 cm. The conspicuous peak at 30 cm results primarily from vessels found in the Dolly Madison and Go-Kart pits.

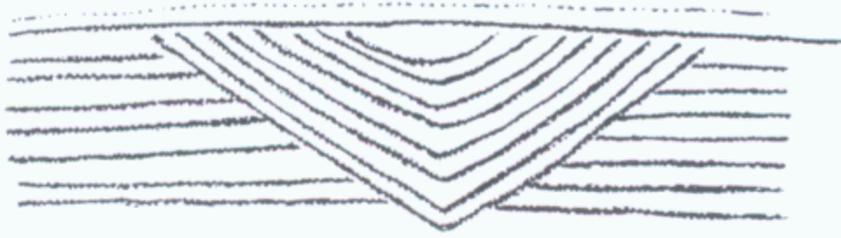
Incised Motifs

A total of 13 Lawson Field phase vessels contained incised designs. All incised vessels were bowls. Incising occurred primarily on the exterior of the vessel (N = 10). Only three vessels displayed interior incising (see Appendix A). A total of seven distinct patterns were recognized on these vessels (Figure 153 and Table 44). Three vessels contained multiple parallel lines that were too fragmentary to identify as one of these motifs. However, those three designs appeared to be filler lines similar to categories A-D shown in Figure 153. One additional vessel, not included in this count, exhibits what appears to be an engraved design. The engraved design which is somewhat dendritic in outline is illustrated in Figure 141e.

The number of vessels from the Victory Drive site decorated with incising is unfortunately small. Only one or two vessels of each design were found. There was no overlap of designs between features noted although the incised sherds from the Go-Kart pit were too small to identify designs. The most common motifs from the site (Categories A-D) appear typical of Ocmulgee Fields Incised designs found elsewhere in the valley. Similar Lamar-like motifs were noted on Bull Creek vessels (see Figure 129). Categories A-D were found exclusively on the exteriors of bowls.

By contrast, the more elaborate designs (Categories E-G) were found on vessel interiors. Motifs E and F were found on the inner portions of bowls with broadly flaring rims (Vessels 1 and 5). Motif G decorated the interior portion of a flanged rim bowl (Vessel 28). A determination of just how widespread the remaining designs may be will require further research using collections from other sites.

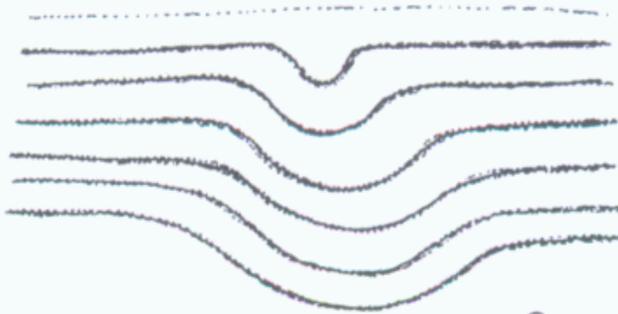
Category A



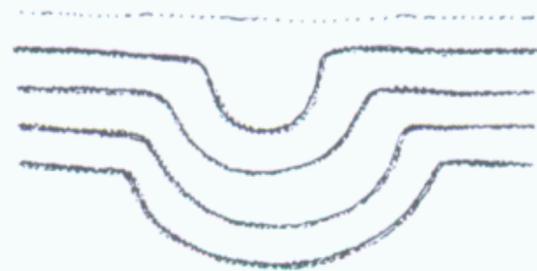
Category B



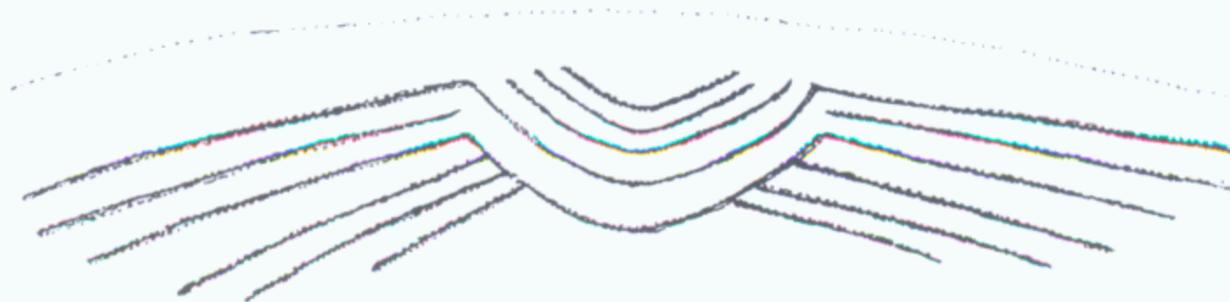
Category C



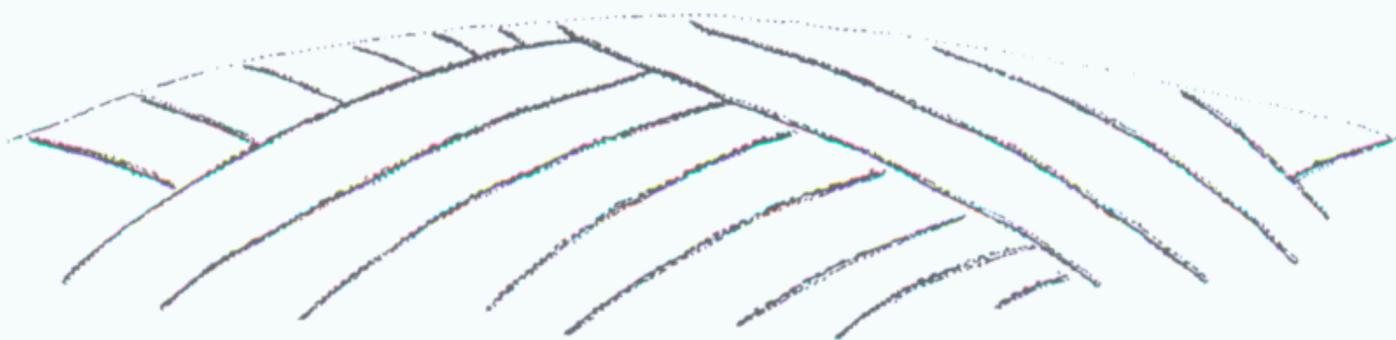
Category D



Category E



Category F



Category G

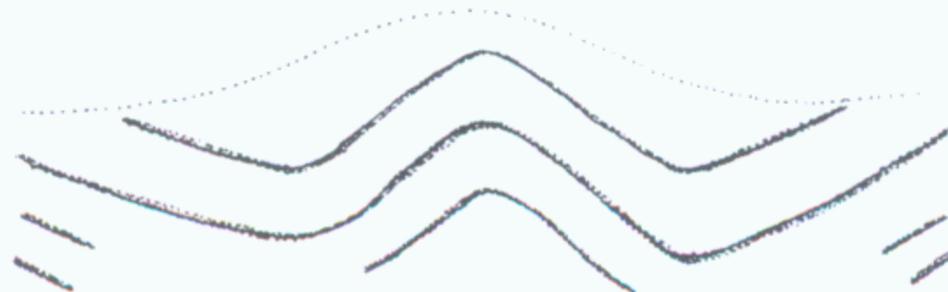


Figure 153. Illustrations of Lawson Field phase incised motifs from the Victory Drive site.

Table 44. Incised Motifs found at the Victory Drive site.

Category	Description	SAS Pit	Dolly Madison	Go-Kart
A	nested triangles separated by parallel bands	N = 0	N = 2	N = 0
B	nested half circles separated by parallel bands	N = 0	N = 2	N = 0
C	parallel lines with isolated undulations	N = 2	N = 0	N = 0
D	nested U-patterns separated by parallel bands	N = 0	N = 1	N = 0
E	nested triangles between flaring lines	N = 0	N = 1	N = 0
F	perpendicular curving lines	N = 0	N = 1	N = 0
G	undulating lines	N = 0	N = 1	N = 0
Unid.	fragmentary parallel filler lines	N = 0	N = 0	N = 3

Summary of Victory Drive Site Pottery

Our examination of pottery from the Victory Drive and Bull Creek sites has provided a more secure foundation for the interpretation of aboriginal occupation from both site specific and regional perspectives. The occupations span the period of circa A.D. 900 to 1800 and include pottery from the early Mississippian Averett phase (A.D. 900 to 1300), the late Mississippian Bull Creek phase (A.D. 1400-1550), and the historic Creek, Lawson Field phase (A.D. 1715-1835). The bulk of the Bull Creek phase and a substantial portion of the Lawson Field phase collections are the result of previous excavations (Lester 1938; Kelly 1950; Schnell 1963, 1970). Information relevant to pottery of these phases was procured from the previously unpublished compilations and reexamination of surviving collections. The Averett phase collections result from the present SAS investigations.

Portions of the Victory Drive site, as currently defined, were intensively utilized during each of the three phases. The relationship to the Bull Creek site, as currently defined, relates primarily to the single Late Mississippian, Bull Creek phase occupation. As previously noted, the examination of Bull Creek phase pottery presented in this chapter represents a summary of the larger study produced in a separate report on that site (Ledbetter 1995c).

The pottery from the Victory Drive site has been examined in terms of characteristics such as surface treatment and decorative motifs which have typological and temporal significance. Pottery from the site has also been examined with respect to vessel form allowing comparison of the three occupations in terms of varying intensity of occupation.

Our pottery study is important with respect to the Averett phase occupation. While pottery counts were relatively small, specifically in terms of decorated pottery, the recovery of sherds from radiometrically dated features provides a firm foundation for examination of predominantly plain pottery traditions. Our comparison of the Victory Drive site pottery to material previously classified as Averett and Upatoi provided the opportunity to examine poorly defined ceramic characteristics of the Averett phase and Upatoi complex. The study disclosed clear similarities between Averett pottery, as defined at Victory Drive, and pottery from the Upatoi complex type site.

Our examination of pottery associated with the Bull Creek and Lawson Field phase occupations provides quantified data for distinguishing characteristics of various pottery types. The examination of vessel forms provided data consistent with expectations for permanently occupied household occupations. The vessel form study provided a clear contrast to more limited diversity evident in vessels of the less intensive Averett occupation.

Chapter 13 Euro-American Artifacts

Late Eighteenth/Early Nineteenth Century Euro-American Artifacts Associated with the Creek Occupation

The types of machine-made artifacts recovered from the Creek pits excavated at the Victory Drive site suggests an occupation probably dating from the last decade of the eighteenth century into the first two decades of the nineteenth century. Those artifacts can be associated with confidence to the Creek occupation. A small number of similar artifacts were also recovered from the plowzone of the site which probably date to the same occupation. It is possible that some plowzone artifacts are associated with the earliest white settlers.

Table 45 provides an inventory of artifacts that probably date to the historic Indian occupation. Due to differing recovery techniques, the proportions of various artifact types are not comparable between features. The Go-Kart and Dolly Madison pits were not screened. The larger counts of small objects from the SAS pit results from fine screening.

Additional nineteenth century ceramics, which date from the 1830s to the 1860s, have been tabulated by excavation provenience throughout this report. Those ceramics are represented by less than 50 whiteware sherds decorated by various forms of hand painting, transfer printing and edge decoration. The mid-nineteenth century ceramics will not be examined further.

Table 45. Euro-American artifacts relating to the Creek occupation.

Artifact Type	Go-Kart Pit	Dolly Madison	SAS Fea.2	Test Pits	Total
Ceramics					
Plain creamware	0	0	2	0	2
Handpainted polychrome creamware	0	0	1	0	1
Plain pearlware	6	75	2	10	93
Handpainted polychrome pearlware	6	19	5	0	30
Handpainted blue pearlware	2	0	0	0	2
Green edge pearlware	0	0	0	2	2
Blue edge pearlware	1	11	0	2	14
Blue transfer printed pearlware	0	2	0	1	3
Annular pearlware	2	0	1	0	3
Glass					
Olive green bottle glass	4	3	106	14	127
Clear glass	1	3	7	0*	11

Table 45. Euro-American artifacts relating to the Creek occupation.

Artifact Type	Go-Kart Pit	Dolly Madison	SAS Fea.2	Test Pits	Total
Fire Arms					
Gunflint (British flint)	1	0	2	0	3
Brass sideplate (flintlock)	0	0	0	1	1
Gun barrel	1	0	0	0	1
Tools and Personal Items					
Wrought nails	5	5	5	0	15
Iron staple	0	1	0	0	1
Iron hook	0	1	0	0	1
Carpenters adze	0	1	0	0	1
Scissors handle fragment	0	1	0	0	1
Carved bone handle fragments	0	2	0	0	2
Riveted iron band	0	0	1	0	1
Iron horse bit	0	2	0	0	2
Horse shoe	0	1	0	0	1
Iron kettle "spider" leg	0	1	0	0	1
Unidentified iron	6	11	15	0	32
Rolled brass cones (tinklers)	1	2	3	0	6
Rolled ferrus metal cones	0	6	0	0	6
Cut sheet brass	2	13	34	0	49
Cut sheet pewter	0	0	1	0	1
Brass tube	0	1	0	0	1
Glass beads	0	1	17	2	20
Brass button	0	1	0	0	1
Pewter button	0	1	0	0	1
Pewter bead	0	0	1	0	1
Soapstone pipe bowl fragment	0	0	0	1	1
Total	38	164	203	33	438

*Clear glass recovered from test pit excavations is not included.

According to the figures in Table 45, slightly more than 400 Creek occupation Euro-American trade items were recovered from feature contexts and just over 30 artifacts which may potentially date to the Creek occupation were recovered from the plowzone collections from the Victory Drive site. Compared to aboriginally produced pottery, these artifacts represent a minor facet of the Creek material culture for the site. In the collections from the Creek pits aboriginal pottery outnumbers trade items by approximately ten to one. Artifacts associated with the Creek occupation will be examined using all collections. Selected artifacts are illustrated in Figures 154 and 155. Additional artifact photographs are presented in Chapter 3.

Ceramics N = 150 (Figure 154).

This category consisted predominantly of pearlware sherds which were found in each of the features and in the plowzone deposits of the test pits. Pearlwares, which were manufactured from approximately 1790 to 1830, accounted for 98 percent of the ceramics. The majority of the sherds (63.3 percent) were plain. Vessel forms included plates, saucers, and small bowls. The majority of the pearlware sherds were found in the Dolly Madison pit (N = 107). The large number of sherds from that pit represented shattered pieces of three plates and two bowls.

Three small creamware sherds were recovered from SAS Feature 2 (Figure 154). These ceramics were manufactured from approximately 1760 to 1820. The combination of creamwares and pearlwares in the feature may indicate a late nineteenth century date for the feature.

Glass N = 138. Glass recovered from the Creek pits consisted predominantly of olive green bottle glass (92.0 percent). Olive green glass is generally associated with liquor bottles of the period. Figure 154 illustrates the neck portion of one of the bottles. The illustrated piece of glass is typical of the fragmented

condition of the glass recovered from the pits. One piece of glass appeared to be worked into some form of cutting tool (Figure 154). The piece of glass had been flaked much like a projectile point or gun flint.

A small number of clear glass pieces were also recovered from the pits (N = 11). Most pieces were too small to identify vessel type. The Go-Kart pit did produce a fragment of a stemmed drinking glass.

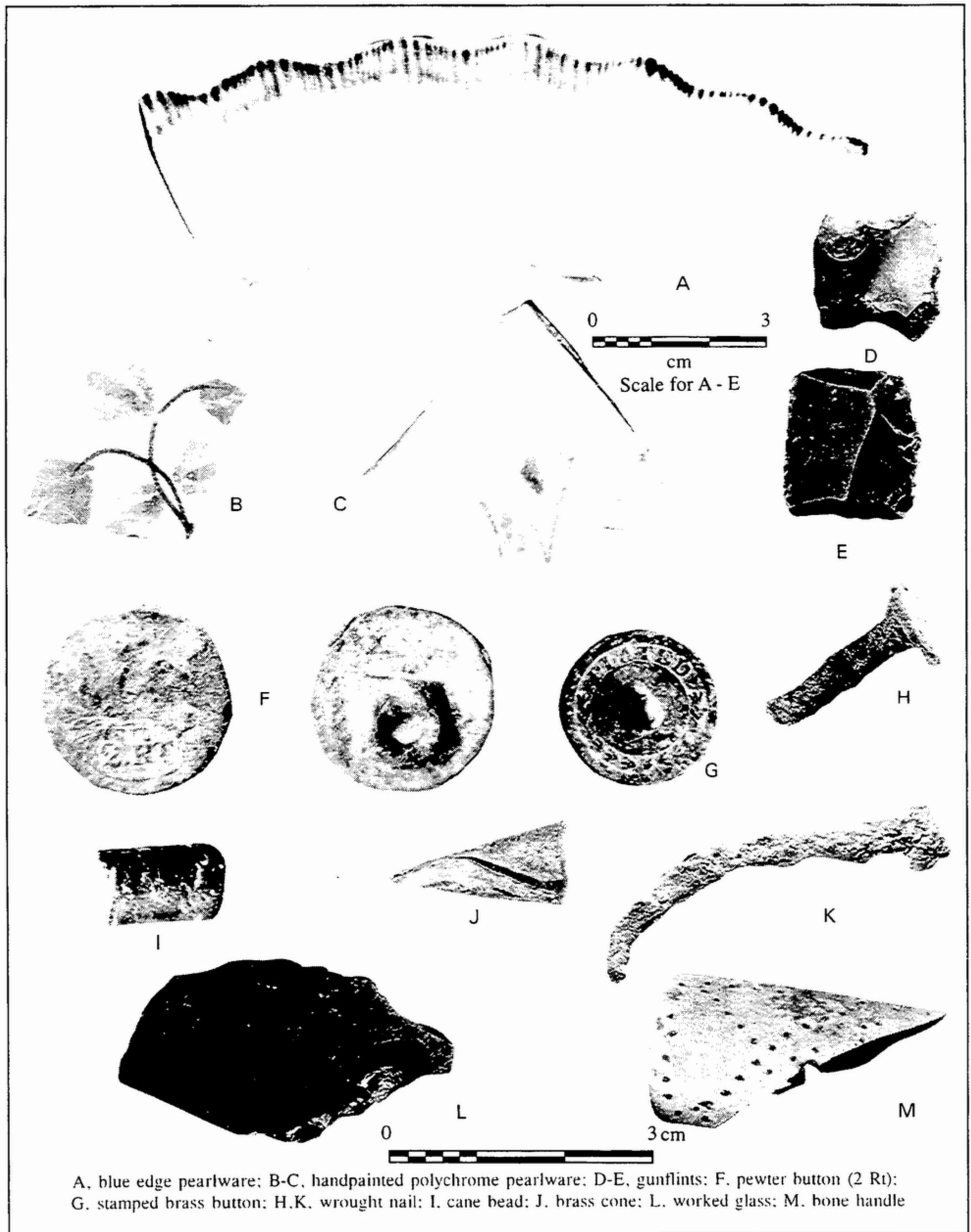
Flintlock Fragments and Gunflints

N = 5. The Victory Drive site excavations produced only a few artifacts associated with firearms. Newspaper accounts show a photograph of a flintlock gun barrel found at the Go-Kart site (see Figure 29). The gun barrel was not included in the curated collections. One fragment of a brass side plate from a trade musket was recovered from test pit excavation. The piece is too fragmentary for further description. Typical examples of British gunflints were recovered from the Go-Kart and SAS pits (Figure 154). Musket balls were not found in the collections from the site.

Construction Remains N = 16. This category included 15 hand wrought nails (Figure 154) and one large iron staple-like object (see Figure 36). Nails were generally poorly preserved, but all appeared to be **hammered rose head varieties**. Wrought nail fragments were found in each of the Creek pits excavated on the site. The most complete examples ranged from 60 to 80 mm in length. The size range appears typical of common utilitarian nails.

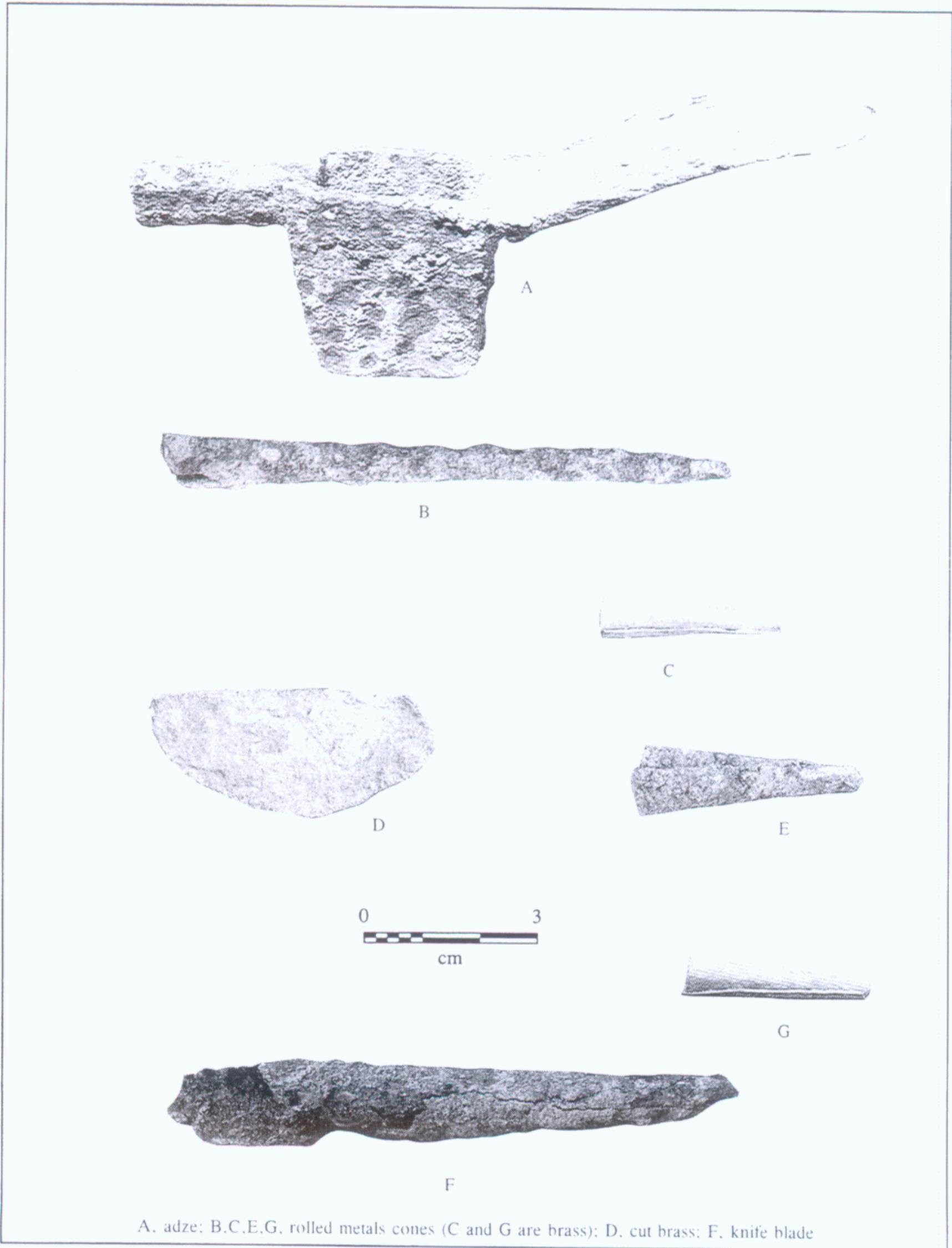
Miscellaneous Tools and Implements

N = 11. Most of the objects in the category were recovered from the Dolly Madison feature. That feature produced a carpenter's adze, scissors fragments, an iron kettle leg, a harness hook, a horse shoe fragment, and two horse bits (Figure 155). The bit is a common jointed-mouth curb variety.



A, blue edge pearlware; B-C, handpainted polychrome pearlware; D-E, gunflints; F, pewter button (2 Rt); G, stamped brass button; H,K, wrought nail; I, cane bead; J, brass cone; L, worked glass; M, bone handle

Figure 154. Examples of Euro-American manufactured artifacts from the Victory Drive site.



A. adze; B.C.E.G, rolled metals cones (C and G are brass); D. cut brass; F. knife blade

Figure 155. Examples of Euro-American manufactured metal artifacts from the Victory Drive site.

The SAS pit produced a fragmentary object similar to an iron band joined by iron rivets. The object consisted of a 3.1 cm wide strip of iron and measured 20 cm in length and 7 cm in width. Figure 90 shows the object during excavation. The shape of the object indicates a binding or clamping device.

The Dolly Madison pit also produced fragments of two bone handles. The tools or utensils to which the handles were attached was not determined. One of the handle fragments is decorated with punctations.

Additional tools may be represented in the badly deteriorated fragments of unidentifiable iron. Fragmentary iron from the Dolly Madison pit includes objects similar to a portion of a knife blade and a chain link.

Buttons N = 2. Two metal buttons were recovered from the Dolly Madison pit (Figure 153). One was a flat brass button, 13 mm in diameter, with a plain front. The back contained the lettering "plated" on the top with bird's feet-like punctations below. The button corresponds to South's Type 18 which was manufactured from approximately 1800 to 1830 (South 1964).

The second example was a pewter military button, 15 mm in diameter. The button was decorated with an eagle and the lettering "2nd regiment." The button represents a military vest button of the early nineteenth century. Buttons similar to this example were manufactured during the period of 1808 to 1811 (Albert 1976:20).

Beads and related objects N = 21. Glass beads were identified in the feature and plowzone collections. The collections include 17 cane beads, one larger round bead, one faceted bead, and one seed bead (Figure 153). One bead-like object made from pewter was also recovered.

Cane beads were recovered primarily from the fine screened collections of SAS

Feature 2. The 16 beads from Feature 2 ranged in diameter from 2.5 to 3.5 mm and ranged in length from 3.5 to 6.5 mm. Colors included red, blue and green. A larger red cane bead found in the Dolly Madison pit was 5.0 mm in diameter and 10 mm in length.

One seed bead was also recovered from SAS Feature 2. The bead was dark blue in color and measured 3.4 mm in diameter. A larger round glass bead was recovered from the plowzone in Test Pit 4. The bead was green in color and measured 11.3 mm in diameter. One amber colored faceted bead was recovered from Level 2 in Test Pit 7. The bead measures 6.5 mm in width and 5.5 mm in length. The bead lacks the patina of other glass beads from the site and may possibly date to a more recent occupation.

One bead-like artifact made from pewter was also recovered from the SAS feature. The object is round, 7.2 mm in diameter, and has an attached eyelet. The object is drilled on either side. When excavated, a thin wire extended from the opening.

Worked sheet metal objects N = 62. This category consists of small pieces of sheet metal salvaged from manufactured utensils such as kettles. Most of the objects (N = 55) are made from brass. The remainder are made from ferrous material (N = 6) and pewter (N = 1). Most of the objects are simply small pieces of cut brass (N = 49). In some cases, the cut sheet metal was used to produce objects commonly called tinkler cones (Figure 153 and 154). These consist of pieces of brass or ferrous material rolled into the shape of a cone. A small hole left at the end allows attachment of some type of string. Twelve examples were recovered from features.

Soapstone Pipe Fragments N = 1. One fragment of a tobacco pipe bowl made from soapstone was recovered from Test Pit 3. The pipe may be related to the Creek occupation.

Chapter 14

Subsistence Studies

Examination of faunal and floral remains found during data recovery required special attention. Because of highly acidic soils, bone and charcoal were poorly preserved in most of the excavated area. These poor preservation conditions affected bone more than charcoal. Bone was well preserved only in the large historic Creek pit, Feature 2, and bone was essentially absent in the prehistoric features. The one exception was Averett Feature 82, which contained a small amount (N = 53) of unidentifiable calcined bone, including six fragments of unidentified bird bone and 47 fragments of unidentified mammal bone. Likewise, charred botanical remains were common only in the Creek pit. There were small amounts of charcoal in several prehistoric features and for that reason the analysis of botanical remains presents the best opportunity to examine earlier subsistence practices. The faunal remains were examined by Lisa D. O'Steen and botanical remains by Andrea Shea. The reports of these analysts compose the remainder of this chapter.

Faunal Remains

Over 3,900 vertebrate and invertebrate remains were recovered from the ca A.D. 1800 Feature 2 at the Victory Drive site. These remains represent an early nineteenth century Creek occupation, and are a valuable contribution to data on subsistence patterns during this period in Georgia, where bone preservation is often poor due to soil acidity.

The results of this analysis support the idea that major changes in choice of animal food elements of historic period Native American diet did not occur until sometime during the eighteenth century. This change is reflected by the fact that domesticated animals do not appear to have been part of the early

eighteenth century Cherokee diet from the Brasstown Valley in north Georgia (O'Steen, personal communication) and from the Little Tennessee River Valley in Tennessee (Bogan et al. 1986). Little comparative data is available for Creek components from this period, but it is assumed that subsistence between these two contemporary groups was similar. Hunting, fishing and collecting of wild game supplied the meat protein in the Native American diet during the early historic period. By the early nineteenth century, wild species were still being exploited, but domestic mammals and birds had become significant components of the Creek diet as reflected by the contents of Feature 2 and Creek features previously excavated on the Victory Drive site (Schnell 1970). The early nineteenth century Cherokee assemblage from the Brasstown Valley in north Georgia indicated increasing utilization of domestic chicken and mammals (O'Steen, personal communication).

Methods

Vertebrate faunal remains from the Creek pit excavated during data recovery (Feature 2) were identified using standard zooarchaeological analysis techniques and a comparative skeletal collection. All bone submitted was examined and included in this report. Faunal remains were collected from soil screened through 0.64 cm (1/4 in) and 0.32 cm (1/8 in) mesh and from flotation samples. The north half of the feature was excavated and screened through 0.64 cm mesh, while the south half was excavated in cultural strata, and was screened through 0.32 cm mesh. The number of individual specimens (NISP) and the weight of all analyzed bone are tabulated for each provenience and/or analytical unit. Zooarchaeological material is quantified by feature, stratum, species, weight and count.

The minimum number of individuals (MNI) is calculated for each species, genus, and family, (where appropriate) from the sample proveniences. MNI is calculated using paired left and right elements. Where possible, comparative age, sex, and size of animals were determined. The MNI for large species in this sample is probably lower than it should be because the carcasses and bones were often cut, chopped, or broken into portions prior to, or after, preparation and disposal. Biomass is calculated using a program developed by Stephen Hale, Irvy Quitmyer and Sylvia Scudder of the Florida State Museum in Gainesville, Florida (Hale et al. 1985). While there are acknowledged problems with this formula, it is the most time efficient method available for calculating relative quantities of meat provided by certain animals, and is used only as an indicator of the relative importance of different species in the represented diet.

Modifications of bone, such as burning, bone pathologies, rodent and carnivore gnawing, and cut marks, were recorded. Only two types of cuts, hack marks and superficial cuts, were identified in this assemblage. A hacked cut through the bone, or actually broke or cracked the bone. Superficial knife cuts generally make shallow, smooth incisions. Cut marks were identified on deer, pig, cattle, and turkey bone from two Creek pits.

Unidentified medium to large bird bone fragments are probably turkey or chicken, but could not be conclusively identified as such. Most of the unidentified large mammal fragments probably represent deer and the two major domestic mammals, pigs and cows. Because of their fragmentary condition, these remains could not be identified to the species level. Differential preservation due to acidic soils and scavenging animals may have resulted in a lower rate of recovery for very small, delicate bones, especially fish and birds. However, the bone preservation from the Creek pits at 9Me50 is very good.

A large collection of bone recovered from a second Creek pit excavated previously on the Dolly Madison plant was also examined. The pit has been designated as Feature 1 in an earlier report (Schnell 1970). Because this bone was not screened during excavation, the above methodology was not applied to these materials. Instead, bone from pit was scanned and assessed for identifiable species and general frequencies of identified species.

Results

Bone represented in the unscreened sample from the Dolly Madison pit (Feature 1) included deer, bear, domestic cow, domestic pig, turkey, domestic chicken, freshwater mussel, box turtle, and aquatic turtle (cooter or slider). Most of the bone represents cow and deer, and most of the bone is unburned. Hacked marks were found on deer, bear, and cow bone (Figures 156 and 157). Superficial cuts were noted on astragali of both deer and cattle. These cuts probably reflect the removal of lower legs and feet at the hock joint. No sawed cuts were observed. Most of the elements represent adult animals. One unfused cow ulna indicates an animal less than 3.5 years of age. A cow maxillary fragment with an erupted second molar and erupting third molar indicates an animal less than 2-2.5 years of age (Schmid 1972:75, 77). Other cow elements indicate that most cattle are at least one year of age, as evidenced by fused calcanei and phalanges. Most of the remains from the pit represent what is usually considered butchering refuse, including head, lower leg, and foot elements. Few bones from the meatiest portions of these animals were observed.

Bone remains from the pit found during data recovery (Feature 2) at the Victory Drive site, reflect a diet composed of primarily mammal biomass, including three large and two small species. A minimum of four birds, three turtles, six fish, four frog/toads, and seven freshwater mussels comprise smaller, but consistent, portions of the diet.



Figure 156. Examples of hack marks found on deer metapodials from the Dolly Madison feature.

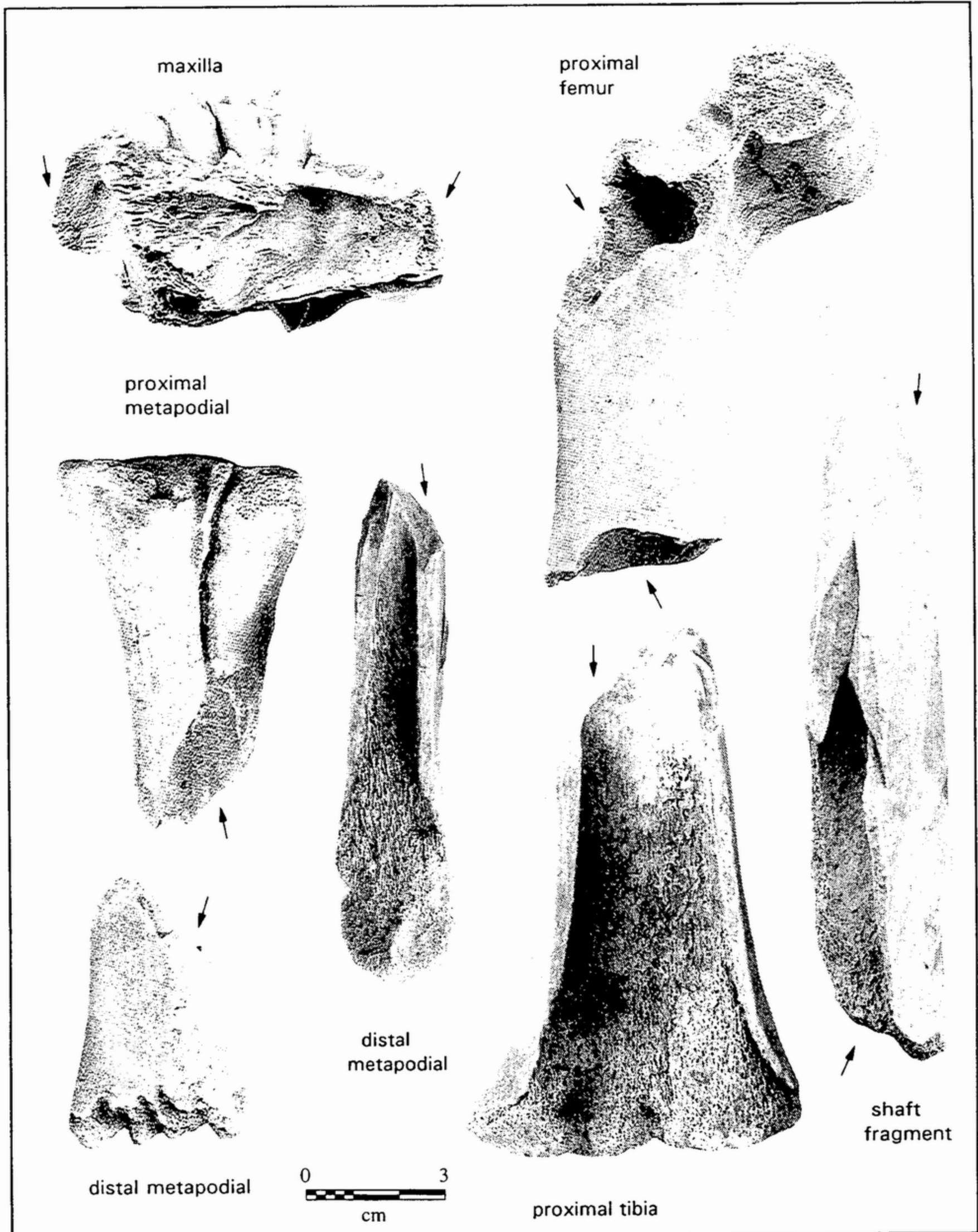


Figure 157. Hack marks found on cow bone from the Dolly Madison pit (marked by arrows).

Birds, turtles, and fish, respectively provide the second, third, and fourth highest proportion of the represented biomass of Feature 2. The frog/toads may be commensal species, since they often burrow into soil. However, only leg, vertebrae, and pelvis fragments of frog/toads were recovered. This lack of skeletal completeness and the burning on two elements suggest that they may have been a very minor dietary element. The two mice from Feature 2 are considered commensal, since they are attracted to human garbage. Burning was identified on 594 bone remains from Feature 2. Thirteen percent (N=76) of burning occurred on fish remains. Two amphibian remains and 12 fragments of turtle shell (2.4%) also exhibited burning. The remainder of burned elements were primarily unidentifiable bone, unidentified mammal bone, and unidentified bird bone.

Among Feature 2 identified species, deer provided one third of the estimated biomass in the assemblage (Table 46). Domestic cow and pig provided the second and third highest biomass in Feature 2. Four deer, three pigs (including a male, a female, and a juvenile), one cow, one squirrel, and two mice were identified in Feature 2. Superficial cuts and a possible hacked cut identified on deer bone are depicted in Figure 158. One possible hack mark suggests disarticulation of the foreleg. The remaining identified cuts were superficial, and appear to represent either carving of meat off of large portions or efforts at disarticulation of the knee joint and hock joints. Burning on deer elements suggests that portions were occasionally prepared over an open hearth, where less meaty portions such as feet were burned. No cuts were identified on other mammal bone, including those of cow and pig.

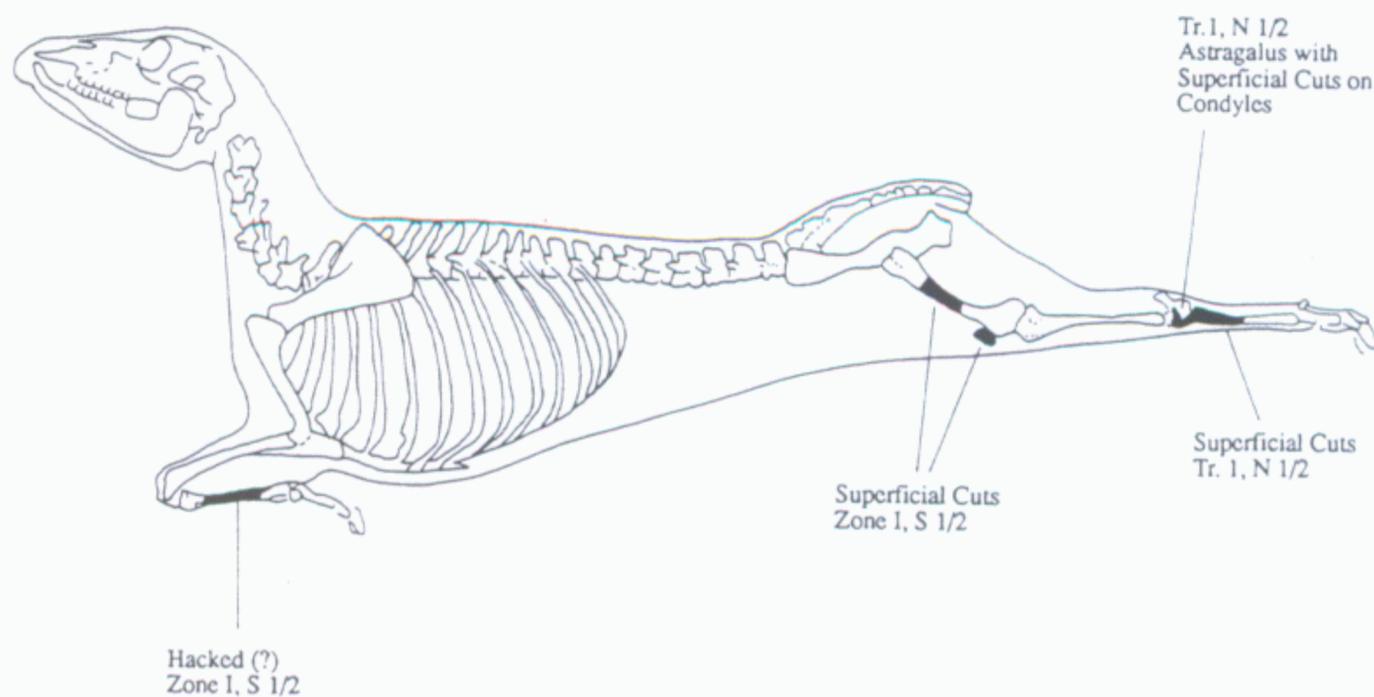


Figure 158. Cuts of meat identified on deer bone from Feature 2.

Table 46. Faunal remains from historic Creek Feature 2 at the Victory Drive site.

Taxon	Number Fragments	Weight (grams)	MNI	Biomass (gm)	Percent Biomass
Invertebrates					
Freshwater Mussel	73	77.6	7	0.02	<0.1
Vertebrates					
<i>Ictalurus</i> sp. (Catfish)	29	2.9	3	0.06	0.2
<i>Micropterus</i> sp (Bass)	49	7.8	3	0.16	0.6
unidentified fish	1034	48.8	---	0.69	2.4
Total Fish	1112	59.5	6	0.91	3.2
<i>Rana/Bufo</i> sp. Frog/Toad	39	1.0	4	0.08	0.3
<i>Terrapene carolina</i> (Box Turtle)	2	11.6	1	0.16	0.6
<i>Chrysemys</i> sp. (Cooter/Slider)	27	31.3	1	0.32	1.1
<i>Dierochyles reticularia</i> (Chicken Turtle)	114	268.0	1	1.34	4.7
Total Turtle	182	311.9	3	1.82	6.4
<i>Meleagris gallopavo</i> (Wild Turkey)	100	92.1	2	1.25	4.4
<i>Gallus gallus</i> (Chicken)	936	25.7	1	0.39	1.4
<i>Passeriformes</i> (Perching Birds)	1	<0.1	1	<0.1	---
Unidentified large/medium bird	188	35.6	---	0.53	1.9
Total Bird	1225	153.4	4	2.17	7.6
<i>Sciurus carolenensis</i> (Squirrel)	2	0.2	1	0.01	<0.1
cf. <i>Peromyscus</i> sp (Mouse)	8	0.1	2	<0.01	<0.1
<i>Odocoileus virginianus</i> (White-Tailed Deer)	117	695.4	4	9.51	33.24
<i>Sus scrofa</i> (Domestic Pig)	28	44.1	3	0.80	2.8
<i>Bos taurus</i> (Cow)	15	349.8	1	5.12	17.9
unidentified small mammal	13	1.9	---	0.05	0.2
unidentified medium-large mammal	1200	583.4	---	8.12	28.4
Total Mammal	1383	1674.9	11	23.61	82.5
Total Fauna	3975	2277.3	35	28.61	100.0

Among identified bird species from Feature 2, turkey provided the largest proportion of the represented diet. Roughly 97 percent (N=909) of the chicken is eggshell fragments. Cut marks were found on three bird bones and a breakage pattern was noted on the distal condyles of turkey metatarsals from Zone II (Figure 159). This breakage pattern probably represents the removal of lower legs and feet from the upper torso of these birds. Spurs have also been broken or cut off from two metatarsals, and one toe bone is cut through. Approximately 5 percent (N=65) of bird bone is burned.

Turtles provided the third highest proportion of biomass in Feature 2 (see Table 46). Three species, a box turtle, a cooter/slider, and a chicken turtle, were identified. The chicken turtle remains represent one large

individual from the north half of Feature 2. All but one turtle element are shell and carapace fragments. A total of 17 turtle shell fragments (9.3% of turtle remains) is burned, but no cut marks or other cultural modifications were noted. Turtles often supply the third highest percentage of biomass in southeastern prehistoric and historic Native American assemblages.

Three catfish and three bass were identified from the fine screened collections of Feature 2, and provide approximately three percent of the total biomass from the feature. Most of these remains represent very small fish that could have been easily caught in nets, or with very small hooks. Approximately 92 percent (N=950) of fish remains are scales, spines, ribs and vertebrae that are difficult to identify, even to the family level. One probable largemouth bass is identified from Zone II. Approximately 7 percent (N=76) of fish bone is burned. No cuts or other modifications were noted.

Four frog/toads are identified from Feature 2. If these represent food items, they provided less than 0.5 percent of the total biomass. No cuts were identified on the remains; however, two leg elements exhibited burning. Similarly, shellfish provided even less of the biomass, <0.1 percent of the total. No other cultural modifications were noted.

Summary and Discussion

A comparison may be made between the early nineteenth century Creek diet represented by the Victory Drive features and diet reflected in a series of Cherokee sites (9To45, 9To48 and 9To49) from the Brasstown Valley in north Georgia (O'Steen and Raymor 1995). The Cherokee features at Brasstown Valley obviously represent a different historic Native American group in a different geographic region of Georgia, but provide some comparative data.

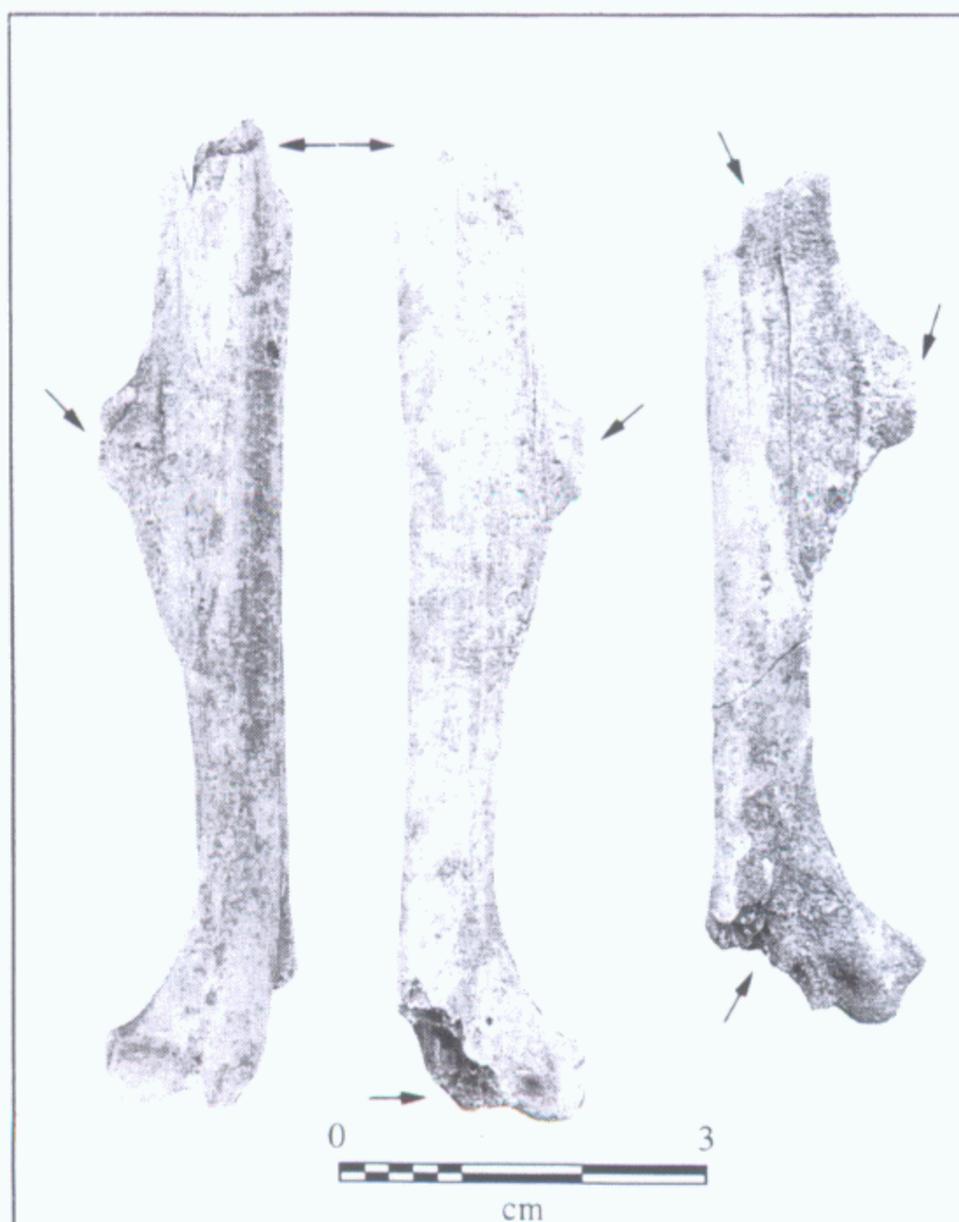


Figure 159. Breakage patterns noted on turkey metatarsals.

The Brasstown Valley sites contained Cherokee pits dating to the early eighteenth century as well as the early nineteenth century. The most conspicuous difference between the two groups of Cherokee features was the presence of domestic species in the later assemblage. No domestic species were identified in the earlier Cherokee assemblage when subsistence still followed a basically prehistoric pattern of exploitation that was focused on hunting and gathering of wild animal species.

By the latter part of the eighteenth century, domestic species would have been introduced and were kept by the residents of Brasstown Valley. There is ethnographic evidence that domestic species were introduced to the Cherokee during the middle and late eighteenth century (Bogan et al. 1986: 481-482). By the early nineteenth century, domestic birds, cattle, and pigs had become the primary contributors to the diet. Of course, there is also variation among the nineteenth century Cherokee features. For example, Feature 719, an early nineteenth century pit, contained less than 0.1 percent domestic biomass, while contemporary Feature 720 contained 54 percent domestic biomass (O'Steen, personal communication). Deer, turtles, and other wild species were still exploited during this later period, and did remain significant supplements to the diet. Perhaps the Cherokee lifestyle by this time was more sedentary, allowing for the maintenance of domesticated animals and birds. Of course, sedentism is not required for the maintenance of domestic species, and all of these species could have been herded or moved from locale to locale. This pattern may also reflect the ongoing depletion of wild species, such as deer and turkeys, during the nineteenth century.

It is interesting that, following deer (in earlier Cherokee contexts) and cattle and pigs (in later Cherokee contexts), turtles usually provide the second highest percentage of biomass (2-9%) in the Cherokee features. There was only one pit (Feature 720) in which birds

comprised the second highest amount of meat (28.9%). Most of this biomass is represented by domestic chicken remains (22.7% of total biomass). In all other Cherokee contexts birds comprise between 0 and 1.7 percent of the total biomass. Apparently wild birds were not sought as often as food resources. The acquisition of domestic fowl may have altered this dietary pattern.

Another interesting finding is the consistent, though minor, representation of amphibians, including a number of frogs/toads and salamanders. The incompleteness of the skeletons of these individuals does suggest that these animals were consumed. If the skeletons were complete, it would be assumed that these animals represented incidental or commensal species that expired in the features. The fact that only certain elements (mostly legs and vertebrae) were recovered suggests that these species were indeed food resources.

Shellfish also provided a small, though rather consistent, part of the diet during the Cherokee and earlier occupations in Brasstown Valley. They did not contribute more than 7 percent of the biomass in any context. Similarly, fish are ubiquitous, but represent very small individuals with elements that often weigh less than 0.1 gm. With one exception, fish contributed no more than 1.5 percent of the biomass. These tiny individuals were very difficult to identify, since they are represented predominantly by scales, spines and vertebrae. The size of the specimens in this assemblage suggest, that similar to the situation at Victory Drive, nets were often used to catch fish. Identified species include sunfishes (including bass), catfish, and suckers. General morphology suggests that many of the unidentified fish may also belong to the sunfish family.

Based upon the bone recovered from Feature 2 at the Victory Drive site, birds (7.6%) and fish (3.2%) contributed a more significant part of the Creek diet than the Cherokee diet from the Brasstown Valley sites.

In Feature 2 at the Victory Drive site, domestic chickens contributed 1.4 percent and wild turkeys 4.4 percent of the biomass or estimated meat. In contrast, birds provided a maximum of less than two percent of the biomass from the Cherokee features in north Georgia. Fish provided a maximum of 1.5 percent of biomass from Cherokee features but provided 3.2 percent from the Creek feature at Victory Drive. Obviously, birds and fish were more often or more regularly consumed, or consumed in larger quantities, at Victory Drive. A greater consumption of fish in particular might be expected at Victory Drive given the proximity of the extensive fisheries at the falls of the Chattahoochee River.

Turtles comprised 6.4 percent of the biomass from the Creek pit, which is very similar to the Cherokee assemblage. Frogs and/or toads and freshwater mussels were also identified in Feature 2, but supplied less than 1.0 percent of the biomass, again very similar to the Cherokee proportions.

Deer contributed one third of the total biomass in the Creek feature, but pigs and cattle supplied just over 20 percent of the represented biomass. In the Cherokee assemblage deer provided between 10 and almost 50 percent of the biomass from two features. A domestic pig and cow were identified in only one Cherokee feature, and represented approximately 50 percent of the biomass. These results provide further support to the idea that by the early nineteenth century in Georgia, Native American populations had adapted in part to Euro-American subsistence patterns.

Similar patterns of adaptation may have occurred amongst both Creek and Cherokee groups in Georgia, although such conclusions must await larger, comparable faunal assemblages from contemporary sites. This pattern was probably hastened by the depletion, through overhunting and habitat destruction, of wild animals, including deer and turkey, during the nineteenth century.

Botanical Remains

Carbonized plant materials were examined from 31 features excavated during data recovery. Flotation samples of soil ranged in volume from 1.0 to 24 liters (Table 47). The total volume of all flotation samples taken from the features was 124 liters. A total of 192.2 g of charcoal was recovered and analyzed. Of the examined features, only one produced no charcoal.

Methods

The laboratory analysis of carbonized plant remains is a slight modification of the procedure outlined by Yarnell (1974:113-114). Each sample is divided into three parts by sifting the material through a series of standard geologic screens - 2.0 mm, 1.0 mm, and 250 microns (0.25 mm). Each fraction is weighed and examined under magnification of 7X to 30X. Only the material retained in the 2.0 mm screen is entirely sorted and quantified by number and weight. The material remaining in the 1.0 mm and 0.25 mm screens is examined for seeds. The remainder is labeled residual. A maximum of 30 fragments of wood charcoal is removed for identification. Standard identification manuals were used (Martin and Barkley 1961; Panshin and de Zeeuw 1964).

Results

The large Creek pit, Feature 2, produced most of the botanical remains from the site (Table 48). Only material from the south half of the pit was examined. The south half included water screened (1/8 inch mesh) charcoal and flotation samples taken from two distinct zones. Only the 1/8 inch screened material from Zone 2 and 12 liter flotation samples from Zones 1 and 2 were analyzed. The material from Zone 1 was scanned for seeds. Tables 49 and 50 present data for the northern pit features (predominantly Averett phase) and the Bull Creek phase features.

Table 47. List of Flotation samples submitted for ethnobotanical analysis.

Feature Number	Location (Block or Test Pit)	Feature Type	Charcoal Weight (grams)	Sample Size
2	Block B	Creek Trash Pit	104.2	24 liters
3	Test Pit 3	Averett Pit	8.6	10 liters
5	Block C	Averett Hearth	7.2	10 liters
13	Block D	Lamar Postmold	<0.1	1 liter
14	Block D	Lamar Postmold	<0.1	1 liter
15	Block D	Lamar Postmold	<0.1	1 liter
16	Block C	Postmold	none	2 liters
20	Test Pit 6	Lamar Pit	2.0	10 liters
22	Test Pit 6	Lamar Pit	0.7	5 liters
26	Block D	Lamar Postmold	<0.1	1 liter
27	Block D	Lamar Postmold	0.1	2 liters
29	Block D	Lamar Postmold	<0.1	1 liter
31	Block D	Lamar Postmold	<0.1	1 liter
33	Block D	Lamar Postmold	0.5	2 liters
35	Block D	Lamar Postmold	<0.1	1 liter
37	Block D	Lamar Postmold	0.1	1 liter
46	Block D	Lamar Postmold	<0.1	1 liter
48	Block D	Lamar Postmold	<0.1	1 liter
50	Block D	Lamar Postmold	0.7	2 liters
57	Block A	Averett Pit	5.8	10 liters
63	Block A	Averett Pit	27.7	10 liters
65	Block C	Postmold	<0.1	1 liter
68	Block A	Postmold	0.3	2 liters
69	Block D	Lamar Postmold	0.3	2 liters
71	Block D	Lamar Postmold	<0.1	2 liters
72	Block D	Lamar Postmold	0.1	2 liters
79	Block D	Lamar Postmold	<0.1	1 liter
81	Block C	Postmold	<0.1	1 liter
82	Test Pit 9	Averett Pit	33.9	10 liters
96	Block D	Lamar Postmold	<0.1	5 liters
97	Block D	Lamar Postmold	<0.1	1 liter

Table 48. Botanical Remains from Creek Feature 2.

Carbonized Plant Remains	South Half 1/8 inch screened		Zone 1 Flotation		Zone 2 Flotation		Total Quantified	North Half Scanned
	Number	Weight	Number	Weight	Number	Weight		
Total Sample Weight in Grams		28.7 g		20.0 g		89.1	137.8 g	
Residual Weight (1.0 & 0.25 MM Screens)		11.5 g		9.5 g		12.6	33.6 g	
Nutshell Weight		0.2 g		<0.1 g		0.5	0.7 g	
<i>Carya sp.</i> (Hickory)	10	0.2 g	1	<0.1 g	18	0.5		Present
<i>Juglans nigra</i> (Black Walnut)								Present
<i>Quercus sp.</i> (acorn)					1	<0.1		Present
Wood Charcoal Composition (Weight)		17.0 g		10.5 g		74.8	102.3 g	
<i>Arundinaria sp.</i> (Cane)								
<i>Carya sp.</i> (Hickory)	6		4		7			
<i>Gleditsia triacanthos</i> (Honey Locust)								
<i>Pinus sp.</i> (Pine)	20		13		20			
<i>Quercus sp.</i> (Oak)	3		12		3			
<i>Ulmus sp.</i> (Elm)	1							
Bark								
Diffuse Porous			1					
Unidentifiable (too small)								
Total	30		30		30			
Seed & Fruit Composition (weight)		<0.1 g		<0.1 g		1.2	1.2 g	
<i>Chenopodium sp.</i> (Chenopod Seed)								
<i>Curcubita sp.</i> (Squash) Rind=R, Seed=S	31R 2S				9R 2F		40R 4S	Present
<i>Diospyros virginiana</i> (Persimmon Seed)								Present
<i>Passiflora incarnata</i> (Maypop Seed)								Present
<i>Phalaris caroliniana</i> (Maygrass Seed)								
<i>Phaseolus sp.</i> (Cultivated Bean)					1W 2F		1W 2F	Present
<i>Prunus persica</i> (Peach Pit)								Present
<i>Zea mays</i> (Maize) Kernal-K, Cupule=C, Cob=Cb	2K 2C		2K 4C		43K 9C		47K15C	Present

Table 49. Botanical remains from northern features (predominantly Averett).

Carbonized Plant Remains	Feature Number											Total			
	3	5	16	57	63	65	68	81	82	82	82				
Total Sample Weight in Grams	19.9	23.7	<0.1	13.1	51.7	<0.1	0.3	<0.1	56.8	165.5					
Residual Weight (1.0 & 0.25 MM Screens)	11.3	16.5	<0.1	7.3	24.0				22.9	82.0					
Nutshell Weight	<0.1	0.2		<0.1	0.1				0.4	0.7 grams					
<i>Carya sp.</i> (Hickory)		6/0.1			3/0.1				12/0.4	0.6 grams					
<i>Juglans nigra</i> (Black Walnut)	18/<0.1	5/0.1								0.1 grams					
<i>Quercus sp.</i> (acorn)		3/<0.1		4/<0.1	3/<0.1				5/<0.1	<0.1 grams					
Wood Charcoal Composition (Weight)	8.6	7.0		5.8	27.6	<0.1	0.3	<0.1	33.5	82.8 grams					
<i>Arundinaria sp.</i> (Cane)		1								1					
<i>Carya sp.</i> (Hickory)				1						1					
<i>Gleditsia triacanthos</i> (Honey Locust)				1						1					
<i>Pinus sp.</i> (Pine)	30	15		2	30	10	17	5	29	138					
<i>Quercus sp.</i> (Oak)		10		26			1		1	38					
<i>Ulmus sp.</i> (Elm)										0					
Bark		4								4					
Total	30	30		30	30	10	18	5	30	183					
Seed & Fruit Composition (weight)	<0.1	<0.1							<0.1	<0.1					
<i>Chenopodium sp.</i> (Chenopod Seed)										24					
<i>Curcubita sp.</i> (Squash) Rind=R, Seed=S															
<i>Diospyros virginiana</i> (Persimmon Seed)															
<i>Passiflora incarnata</i> (Maypop Seed)															
<i>Phalaris caroliniana</i> (Maygrass Seed)	3w	4w							7w	14					
<i>Phaseolus sp.</i> (Cultivated Bean)															
<i>Prunus persica</i> (Peach Pit)															
<i>Zea mays</i> (Maize) Kernal-K, Cupule=C, Cob=Cb															

Table 50. Botanical Remains from southern area Block D (Bull Creek phase).

	Feature Number																	Total				
	13	14	15	20	22	26	27	29	31	33	35	37	46	48	50	69	71		72	79	96	97
Sample Weight (grams)	<0.1	<0.1	<0.1	4.3	2.2	<0.1	0.6	<0.1	<0.1	0.5	<0.1	0.1	<0.1	<0.1	0.7	0.8	<0.1	0.1	0.3	0.6	<0.1	10.2
Residual Weight				2.3	1.3		0.5									0.5			0.3	0.6		5.5
Nutshell Weight				0.4	0.4	<0.1																0.8
<i>Carya sp.</i> (hickory)				30/0.4	31/0.4	2/<0.1																0.8
<i>Juglans nigra</i> (walnut)																						0
<i>Quercus sp.</i> (acorn)					4/<0.1																	<0.1
Wood Charcoal (weight)	<0.1	<0.1	<0.1	1.6	0.3	<0.1	0.1	<0.1	<0.1	<0.1	<0.1	0.1	<0.1	<0.1	0.7	0.3	<0.1	0.1	<0.1	<0.1	<0.1	3.7
<i>Arundinaria sp.</i> (cane)																						0
<i>Carya sp.</i> (hickory)				2	1	4	1							5								13
<i>Gleditsia triacanthos</i>																						0
<i>Pinus sp.</i> (pine)	3	4	19	17	29	4	26	10	15	25	9	12	3	3	6	7	4	7	9	17	9	238
<i>Quercus sp.</i> (oak)				11			1								1	1	1					15
<i>Ulmus sp.</i> (elm)																						0
Bark																						0
Total	3	4	19	30	30	8	28	10	15	25	9	12	3	3	12	8	5	7	9	17	9	266
Seed & Fruit (weight)				<0.1	0.2							<0.1										0.2
<i>Chenopodium sp.</i> (chenopod)																						0
<i>Curcubita sp.</i> (squash) R = rind, S = seed																						0
<i>Diospyros virginiana</i> (persimmon)																						0
<i>Passiflora incarnata</i> (maypop)					1f																	1
<i>Phalaris caroliniana</i> (maygrass)																						0
<i>Phaseolus sp.</i> (bean)																						0
<i>Prunus persica</i> (peach pit)																						0
<i>Zea Mays</i> (Maize) Kernal = K, Cupule = C, Cob = Cb				1K/5c	8c/0.2							2c										11

The information presented in Tables 48 through 50 allows some comparison of the three primary components of the Victory Drive site. Unfortunately, the types of features are not entirely comparable. This is especially true when trying to compare the contents of the large Creek pit to the smaller pits and postmolds of the Averett and Bull Creek phases.

Overall, features of the three components display a similar pattern of a predominance of wood charcoal followed by small amounts of nutshell and even smaller amounts of seeds. Feature 2 contains material from each of the three categories and as expected, given its size, contains the highest diversity of species within each category (see Table 48). The smaller prehistoric features generally contained small amounts of wood charcoal, but relatively few contained nutshell and even

fewer produced seeds. Of the nine probable Averett features, 55.6 percent contained nutshell and 33.3 percent contained seeds. In the 21 Bull Creek features (represented primarily by postmolds), 14.3 percent contained nutshell and 14.3 percent contained seeds. Prehistoric features from the two areas show little difference in the proportions of nutshell types, but there are differences in seed types. The Averett features produced chenopodium and maygrass. The Bull Creek phase features produced corn and maypop.

With respect to maize, fragmented cob remains (cupules) and kernels were recovered from two pits. The cob remains are from 10-rowed cobs and are too fragmented to determine variety. The kernels are crescent shaped, flint type of undetermined variety. Attributes of the maize specimens are listed in Table 51.

Table 51. Characteristics of maize from the Victory Drive site.

Sample Type	Cupule Width	Cupule Length	Glume Width	Est. Row Number
Feature 22 (Bull Creek Phase)				
Cupule	6.5 mm	1.5 mm		10
Feature 2 (Historic Creek)				
Cob Fragment	10.0 mm	2.0 mm	5.5 mm	10
Cob Fragment	10.0 mm	3.0 mm	5.0 mm	10
Cob Fragment	10.0 mm	3.0 mm	5.0 mm	10
Cob Fragment	10.0 mm	3.0 mm	5.5 mm	10
Cob Fragment	10.0 mm	3.0 mm	4.5 mm	10
Cob Fragment	10.0 mm	3.0 mm	5.0 mm	10
Cob Fragment	10.0 mm	3.0 mm	5.0 mm	10
Cob Fragment	10.0 mm	3.0 mm	5.0 mm	10
Cob Fragment	9.5 mm	4.0 mm	5.0 mm	10
Total	89.5 mm	27.0 mm	45.5 mm	
Mean	9.9 mm	3.0 mm	5.1 mm	
	Kernel Width	Kernel Height	Kernel Thickness	
Kernel	9.0 mm	6.5 mm	5.0 mm	
Kernel	7.0 mm	5.5 mm	5.0 mm	
Kernel	8.0 mm	6.0 mm	6.5 mm	
Total	24.0 mm	18.0 mm	16.5 mm	
Mean	8.0 mm	6.0 mm	5.5 mm	

Seven taxa of seeds are represented. All the plants have food value and are typical remains recovered from most Mississippian period sites. Mississippian and historic Cherokee sites in the Little Tennessee River Valley, Tennessee yielded the same spectrum of plant taxa (Chapman and Shea 1981). The remains of chenopod and maygrass are of interest because these plants are considered "native cultigens" and were an important subsistence component during the Late Archaic and Woodland Periods in the southeastern region (Watson 1985). It appears that even with the dependence on the tropical cultigens (maize, beans and squash, chenopod, maygrass) and other wild foods remained important components of the Mississippian diet (Chapman and Shea 1981; Hudson 1976).

Because *Phalaris caroliniana* (maygrass) and several *Chenopodium* species are native to Georgia, a cultivated status for the seeds recovered in the samples is possible but not determined (Cowan 1978). It is possible to identify cultivated chenopod through pericarp patterning; however, a species determination has not been conducted on the chenopod seeds found at the site.

The remaining species were found in the Creek pit. Squash remains include rind and seed fragments. Since no whole seeds were found, variety or species cannot be determined. The cultivated bean measures 6.5 mm long and is a pinto type. Peaches were typically grown during the historic period and are of Spanish origin. Each of these would be expected in a ca A.D. 1800 diet.

Summary

Relatively small amounts of botanical remains were recovered from a number of small features at the Victory Drive site. Many of these features were postmolds and would not be expected to contain substantial amounts of charred plant remains. The one exception was the large pit which dates to ca A.D. 1800.

Remains from the Averett phase occupation may be compared to a series of contemporary features from the Florence Marina site in Stewart County, Georgia (Shea 1989). Those excavations produce several large and small Averett pit features. At Florence, a total of 7.1 g of nutshell was recovered from eight pits. Hickory nut accounted for 95.8 percent of the weight and was found in 62.5 percent of the features. Acorn was found in half of the features and accounted for 4.2 percent of the total nutshell weight. Walnut was found in a quarter of the features as <0.1 percent of the total weight.

Similar numbers appear in the Averett features at the Victory Drive site. Of the eight probable Averett features found to contain charcoal, 62.5 percent contain hickory nut (85.7 percent of total weight). Acorn is found in half of the features but accounts for <0.1 percent of the total. Walnut occurs in 37.5 percent of the features and accounts for 14.3 percent of the total weight. At Florence, seeds were found in only three of the pits. Seeds found in good context were limited to bedstraw (*Gallium* sp.) and grape. At Victory Drive, seeds were found in three of the eight features. Maygrass was found in all three and chenopodium was found in one. Similar collections were also obtained from Averett phase features at the Carmouche site (Gresham et al. 1985). At present there is little confirmed evidence of extensive horticulture associated with the phase.

Samples from the Bull Creek phase features provide limited data. As a mature Mississippian society, a strong reliance upon maize agriculture would be expected. Corn was found in three features. Maypop was the only seed recovered from a Bull Creek phase feature. While several pits have been excavated on the contiguous Bull Creek site, there has been no analysis of botanical remains. Most of the features were excavated at a time when charcoal was not routinely sampled.

The botanical remains from the large Creek pit are entirely consistent with expectations. Historic accounts document the existence of extensive agricultural fields and orchards in the area of the Victory Drive site (Hawkins 1916). In the quantified sample from Feature 2, there are 30 fragments of nutshell (29 hickory nut and 1 acorn). Remains of fruits and vegetables are substantially more common. The quantified samples produced 44 fragments of squash, 3 fragments of cultivated bean, and 52 fragments of corn. Seeds of persimmon and peach were also found in the scanned sample.

A comparison of features from three components shows a decrease in the prevalence of nutshell compared to seeds and fruits through time. During the Averett phase, seeds occur in negligible amounts as part of the total nutshell-seed weight (<0.1 grams). During the Bull Creek phase, seeds account for 20 percent of combined nutshell/seed weights. In the Creek feature, seeds account for 63.2 percent of that combined weight. In this comparison, the Averett phase subsistence base appears to be substantially different providing further data to support an interpretation of a less intensive type of occupation of the site during Averett times.

Chapter 15

Summary and Conclusions

The opportunity to conduct field investigations on a portion of the Victory Drive site was one important element of a larger study conducted for the city of Columbus that included examination and documentation of records and collections from previous investigations of this site and the adjoining Bull Creek site. For that reason, substantially more interpretative data were procured than would otherwise be expected given the obvious restrictions of a narrow corridor project. The Riverwalk corridor is a 7-m wide transect through the site, from which a sample of cultural deposits was excavated. The site contains several components, reflecting the various inhabitants of the broad Chattahoochee River terrace that extended north and east from the mouth of Bull Creek. The wealth of information contained in the records and collections of past excavations, now curated at the Columbus Museum and the University of Georgia, provide the primary means for interpreting our sample.

As a result of the survey phase investigations, the very limited extent of surviving cultural deposits of the Victory Drive and Bull Creek sites had been ascertained (Ledbetter 1994b). Substantial portions of both sites had been severely disturbed by commercial development. The only preserved site area remaining lay in the narrow strip of wooded bluff edge above the Chattahoochee River. The final Riverwalk route skirted the edge of that area on the Victory Drive site and entirely avoided the intact area of the Bull Creek site (Figure 160). For that reason, field work was conducted only on the Victory Drive site. The City of Columbus did provide funds for further research of the Bull Creek site in the form of a detailed archival report (Ledbetter 1995c).

Records of previous investigations on the two sites were generally incomplete. However a quantity of notes, maps, unpublished

manuscripts, as well as large collections of artifacts were available for study. Preservation of material relating to past excavations has been the responsibility of personnel of the National Park Service, the University of Georgia (Department of Anthropology), and the Columbus Museum. In particular, Frank Schnell, Jr., of the Columbus Museum, has diligently preserved records of several excavations at Victory Drive and Bull Creek, which otherwise could not be documented. The Columbus Museum's files of Isabel Patterson, which include correspondence and manuscripts, proved to be a valuable source of information. The contributions of the Columbus Museum as a curation facility must be emphasized with respect to the completion of this report.

The primary goal of this project was the recovery of meaningful data from cultural deposits, primarily features, within the Riverwalk corridor. Based upon survey results (Ledbetter 1994b), the contributions of the Victory Drive data recovery investigations were expected to be limited primarily to a study of the Early Mississippian Averett phase. This assumption was based upon a preponderance of Averett material found during the survey. A secondary goal was the publication of the findings of previous investigations in the larger Victory Drive site area specifically relating to the historic Creek occupation. Data recovery was successful in producing significant data relating to the Averett phase, but equally important information was retrieved on the Bull Creek phase and historic Creek Lawson Field phase. Additionally, information was recovered relating to the Archaic occupations of the site and the historic occupations dating to the nineteenth and twentieth centuries. The more important contributions of this project with respect to each component will be summarized in the following pages.

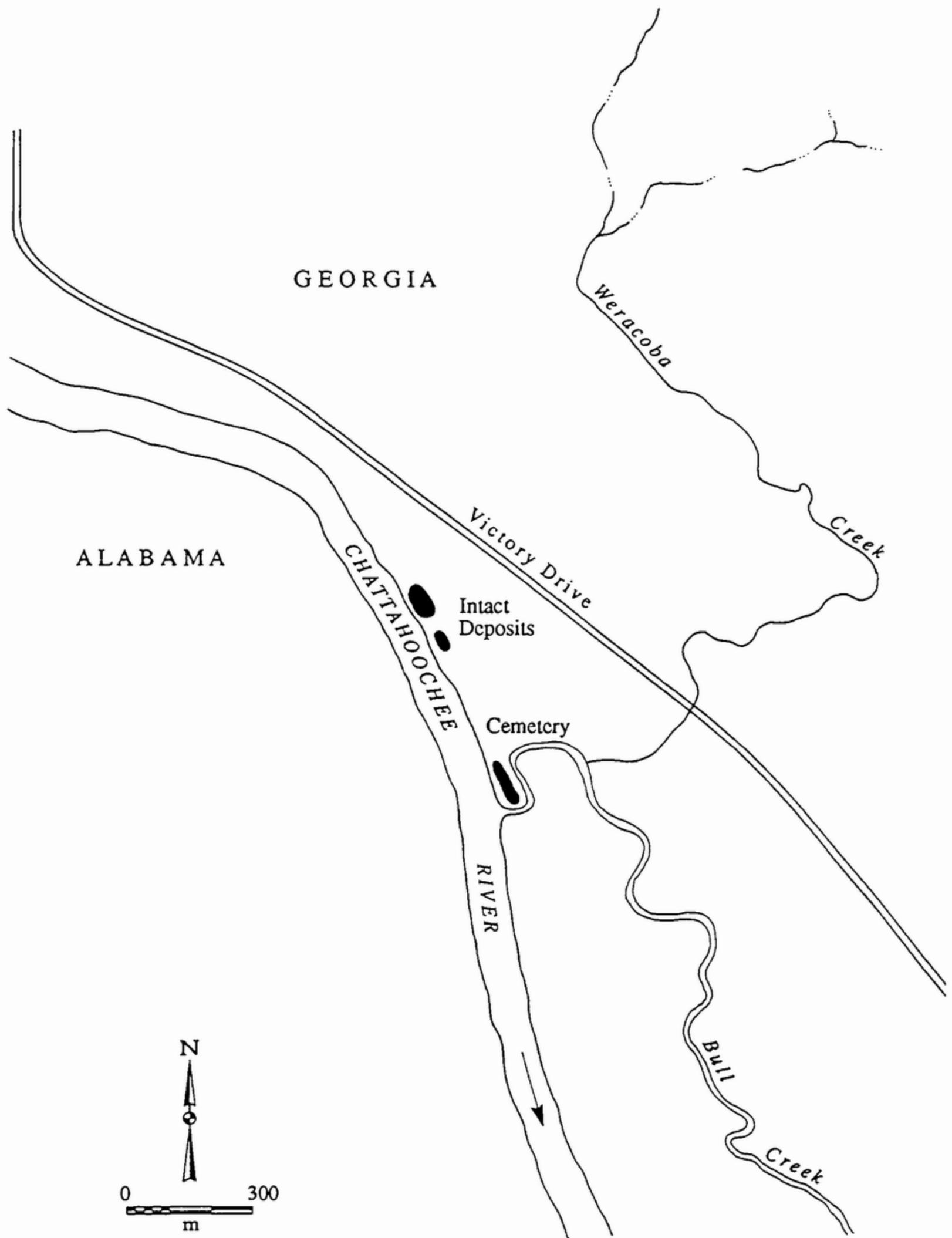


Figure 160. Map showing preserved deposits of the Victory Drive and Bull Creek sites at the time of data recovery.

Paleoindian and Archaic Occupations

Evidence exists for relatively non-intensive but aerially extensive occupation of the Victory Drive and Bull Creek site areas during the Paleoindian and Archaic periods. Based upon very few diagnostic projectile points, the earliest occupation of the site can be dated to approximately 8000 to 11,000 B.C. The majority of the Archaic period artifacts appear to date to the Late Archaic period of approximately 2000 to 4000 B.C.

Only a few Archaic stemmed projectile point fragments were found during the SAS investigations. However, a number of projectile points were recovered during the WPA excavations (Lester 1938). The larger WPA collection was most useful for interpreting the Late Archaic occupation in terms of prevalent point types and raw material preferences.

The most significant projectile point from the site area is a large, fluted Clovis point reportedly found in the 1930s (see Figure 105). The background of the point's discovery is detailed in Chapter 3 and the point is described in Chapter 11. As previously noted, the point has been cited frequently in the archaeological literature of the area. Subsequent investigations have produced no additional Paleoindian material. The WPA excavations did produce two Early Archaic projectile points, which were most likely found on the Bull Creek site (see Figure 103).

The Late Archaic occupation was identified by projectile points similar to Savannah River Stemmed (see Figure 103). Late Archaic lithic material was broadly distributed across both sites but intact cultural deposits were not found.

To a great extent, chipped stone of the two primary lithic-producing components of the site was distinguishable by raw materials. Lithic remains on the Victory Drive and Bull Creek sites were produced primarily during the

Late Archaic and Early Mississippian Averett occupations. Lithic raw materials include Coastal Plain chert, crystal quartz, sugar quartz, and vein or milky quartz. The Late Archaic inhabitants of the site utilized a variety of raw materials, consisting of chert, sugar quartz, and vein quartz, to produce the large projectile points characteristic of the period. In large measure, the Averett occupants utilized crystal quartz. Based upon tools and debris, the Late Archaic occupations generated a low tool diversity, consisting primarily of bifaces and expedient flake tools, waste flakes primarily indicated biface resharpening.

The Archaic occupation in general, and the Late Archaic occupation more specifically, can be characterized as multiple, short term occupations. Based upon the results of data recovery at Victory Drive and the Riverwalk surveys, there appears to be a general scatter of Late Archaic lithic material along the Chattahoochee River bluff edge. The Victory Drive and Bull Creek sites simply represent a portion of that larger occupation area.

Early Mississippian Averett Phase Occupation

The Averett phase represents the local manifestation of the Early Mississippian period along the Fall Line of the Chattahoochee River (Chase 1959a, 1963). Past research has concentrated upon ceramics, and as a result little is known about other aspects of the culture.

Data recovery excavations produced significant data concerning this poorly defined phase. Based upon the results of the SAS survey, the Averett phase component at the Victory Drive site was perceived to be an occupation of low to moderate intensity. The site was not expected to produce artifact-rich midden deposits associated with permanently occupied domestic structures. The site was considered to be the location of seasonal occupations. The results of data recovery appear to confirm that hypothesis.

The Victory Drive Site

Obviously, a site typical of a lower intensity occupation can produce extremely important information simply because the clutter resulting from long term and intensive domestic occupation is absent. Feature patterning may be more evident and there should be less contamination of feature contents. This was the case at Victory Drive. The preserved cultural deposits produced important information relating to site layout as seen in feature density and patterning, lithic and ceramic technologies, subsistence, and perhaps most important, absolute dating.

The heart of the Averett occupation lay in the northern portion of the project area (Figure 161). Evidence of Averett occupation

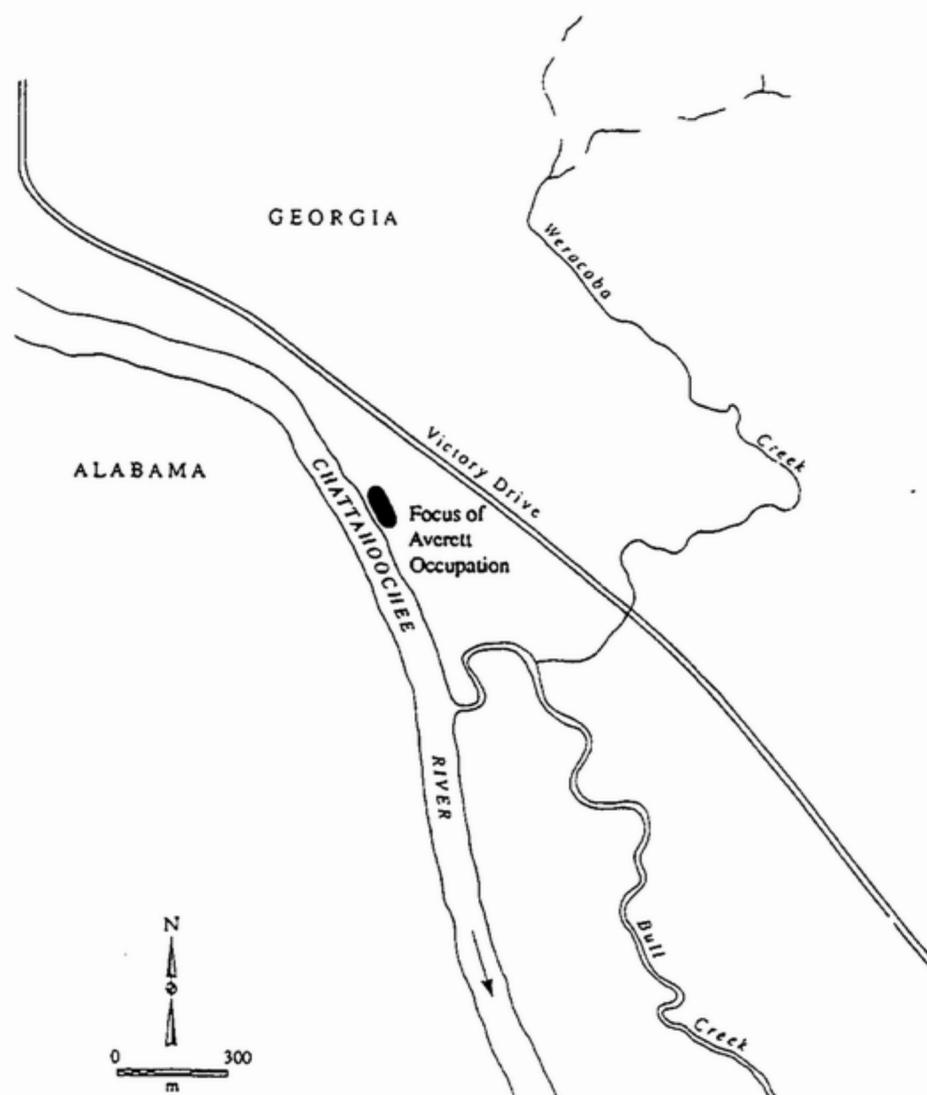


Figure 161. Area of primary Averett phase occupation on the Victory Drive site.

was minimal in the southern area. There is no evidence from any excavations within the presently defined boundaries of the Bull Creek site that the Averett occupation extended into that area. The occupation may have extended to the north for some distance. A few sherds recovered from the parking lot area of the Go-Kart track were Averett. Unfortunately, that area was never adequately surveyed prior to twentieth century development. Survey data along the Riverwalk route indicates a significant Averett presence on sites to the north and south of the Victory Drive site (Ledbetter 1994a, 1994b).

The primary means of investigation of the Averett occupation area consisted of test pits and machine-excavated block excavations. Near the bluff edge a 10 to 15 cm thick Averett midden zone was preserved beneath a disturbed topsoil deposit. An artifact density of slightly more than 150 artifacts per m² was associated with the Averett component in the richest part of the site. Two-thirds of the artifacts were ceramics. The midden zone was absent in the area examined by block excavations, where features produced most of the recorded data.

The features associated with the Averett occupation included scattered postmolds and a relatively small number of small pits (see Figures 74 and 79). Postmolds were discovered in the block excavation but not in the test pits near the bluff edge, possibly indicating that structures were located away from the bluff edge. While postmolds were discovered, well-defined structure patterns were not defined. At best, there appears to be arcs of widely spaced posts around open areas or voids.

The block excavations produced feature patterns similar to those mapped by Bettye Broyles and Frank Schnell, Jr. on the originally defined Go-Kart site (see Figure 28). That area produced numerous postmolds, but no well defined house patterns. The blocks excavated during data recovery produced several arcs of posts, which should represent some form of structure. When these arcs are extrapolated as ovals, a range of 6 to 7 m is observed. It is probable that at least some of these arcs relate to Averett structures; and the small pits found nearby probably represent related hearths, small ovens and possibly

storage features. The presence of charred remains and evidence of firing in some features indicates use for heating or cooking, while those that lack evidence of burning may represent storage features. The small pit features are more numerous near the bluff edge.

There is some comparative information available concerning feature patterning from Averett sites previously excavated in the area. Chase (1959a) provides a map of features found at the Averett type site, 9Me15 (Figure 162). Features were exposed only east of the fence.



Figure 162. Copy of Chase's map of the Averett Site, 9Me15, showing distributions of features (redrawn from Chase 1959a).

The features identified by Chase consisted of a group of large, trash-filled pits. Also included were two pits containing flexed burials. Chase discovered and excavated similar features on a number of Averett sites and concluded that these were the remains of large villages (Chase 1964:16). There is no indication in Chase's writings of attempts to identify house patterns.

More recent excavations at the Carmouche site, 9Ce21 (Gresham et al. 1985) and Florence Marina, 9Sw124 (Ledbetter and Braley 1989) provide additional information on feature patterning in Averett domestic settings. At Carmouche, the Averett occupation and the occupations of a number of other components were concentrated on a small knoll. Small to medium sized pits (40 to 96 cm in diameter), several of which were determined to date to the Averett occupation, appeared to encircle a 10-m diameter area of postmolds devoid of pits. A structure from that pattern for postmolds could not be discerned (Gresham et al. 1985:210). Based upon a variety of evidence, the Averett occupation was interpreted either as a short-term occupation or quite possibly a permanent occupation by a small kin group (Gresham et al. 1985:209-211).

Florence Marina produced evidence of intensive occupation during the Averett phase that probably paralleled that of the original type site. The primary area of investigation was a large, hand-excavated block that measured 21 by 30 m. The block produced a cluster of medium to large pits (range of 50 to 120 cm in diameter) which bounded the edge of a weakly defined concentration of postmolds (Figure 163). Pottery and lithic densities were highest at the periphery of the probable structure. The postmolds may partially define a shelter approximately 6 to 7 m in diameter. The significance of the Florence excavation may rest with the fact that the possible Averett structure was not

substantially constructed. This appears consistent with all Averett site excavations, which to date have failed to produce credible evidence of substantial structures.

The comparative data suggest that several classes of Averett sites exist for which intensity of occupation may be gauged by feature patterns and the magnitude of artifact accumulations. The most intensive occupations contain concentrations of features, many of which are large, which lie adjacent to shelter areas. Sites with less intensive occupation, such as Carmouche, exhibit a similar feature pattern, but the features are smaller in size and fewer in number.

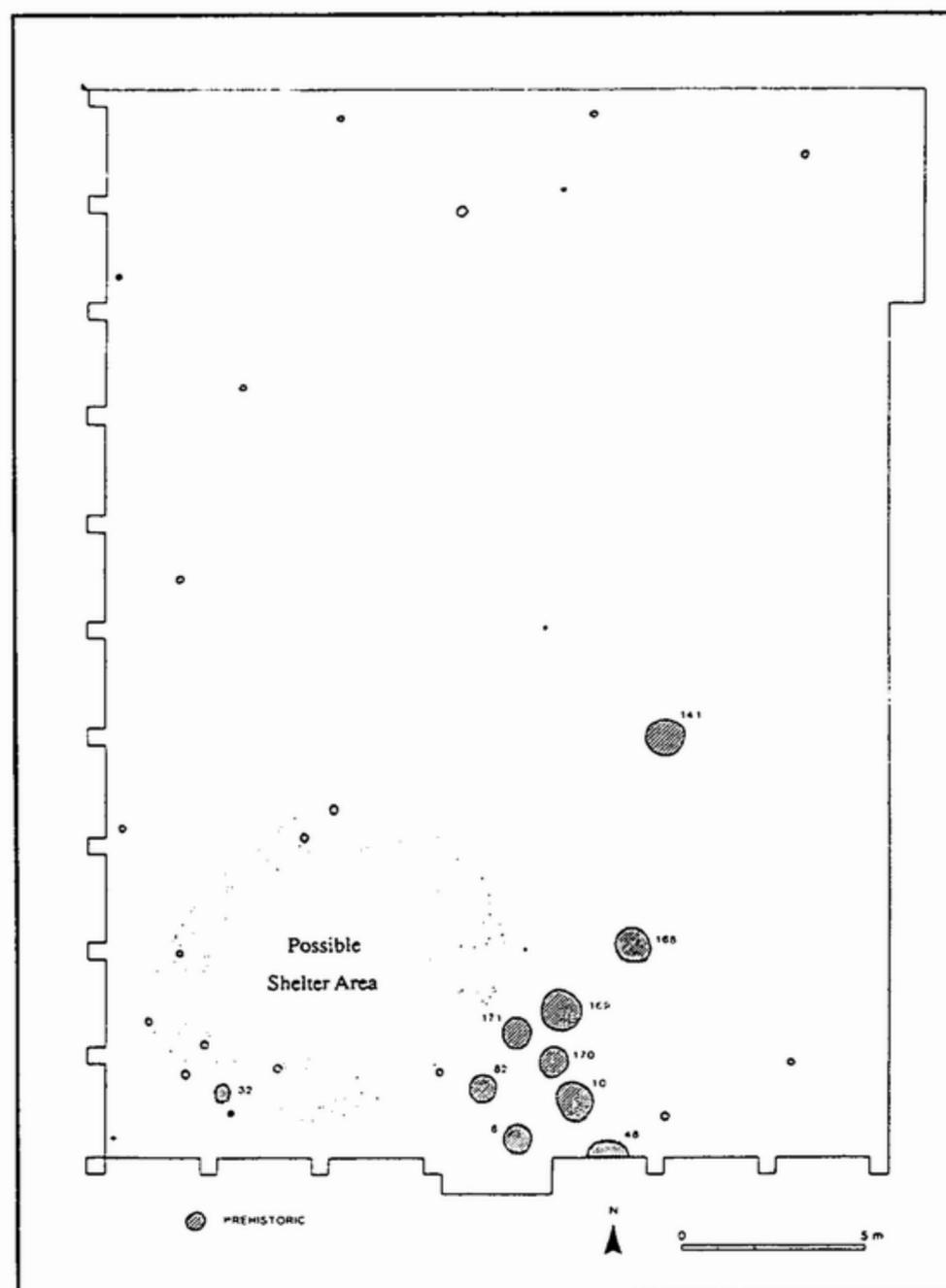


Figure 163. Map of Averett features in block excavation at Florence Marina site (adapted from Ledbetter and Braley 1989:102).

It is suggested here that sites such as Victory Drive, which represent even shorter occupations, produce only a few small to medium sized pits near shelter areas. Presumably, the occupation was not long enough to result in excavation of multiple pits adjacent to the shelters. The excavations at Victory Drive may contain the remains of several Averett occupation episodes. These episodes may have resulted in the construction of shelters, now defined as arcs of postmolds. Associated pits would have been used for various domestic activities including cooking or heating.

At the Victory Drive site, Averett lithic technology consisted of small cobbles of very pure crystal quartz that were reduced by bipolar methods to produce flakes for formal and expedient tools. The bipolar reduction technique utilized an anvil as a hard surface in conjunction with a hammerstone. The resulting flakes often display damage at opposing ends, a consequence of the dual impacts of the hammerstone and the anvil (see Figures 106 and 107). The most recognizable tools associated with the Averett occupation are small triangular projectile points. The 15 bifaces identified as various production stages of this point type include preforms and fragmentary points. The majority were made from an extremely pure grade of crystal quartz. A minority of the points were made from Coastal Plain chert.

The small triangular points from the Victory Drive site were compared to larger collections, consisting of predominantly chert points, from Averett components from the Carmouche and Florence Marina sites (see Table 32). The comparison showed the predominantly quartz points from Victory Drive to be generally shorter and slightly more narrow. These differences may be related, at least in part, to the use of quartz and the use of bipolar reduction at the Victory Drive site.

Other chipped stone tools associated with the Averett occupation consisted of expedient flake tools which were again made predominantly from crystal quartz. Included were small utilized flakes or microliths which would have been used in a variety of cutting and scraping tasks. Another category consisted of crudely triangular, perforator-like implements made from larger flakes, such as core trimming flakes, or exhausted cores. These tools may represent crude forms of the finely made micro-drills previously noted at other Averett sites (Gresham et al. 1985:105; Ledbetter and Braley 1989:133).

A number of factors restricted our examination of Averett pottery from the site. Because Averett is a predominantly plain pottery tradition, most interpretation must rely upon the examination of rim sherds and the very small number of decorated sherds normally found on these sites. The Victory Drive collections were not large and most of the plain sherds found on the site were not found in features. For these reasons the Averett ceramics from Victory Drive were compared to larger collections from other sites in the region. This comparison also gathers information from various manuscripts that relate to the predominantly plain pottery traditions of the Late Woodland/Early Mississippian period of the region. Much of this information is found in the works of Chase as related to the Averett and Upatoi complexes (Chase 1959a, 1959b, 1963, 1964). The texts and illustrations of Chase's original pottery type descriptions are reproduced in Chapter 12.

Examination of the pottery from Victory Drive showed a consistency of traits normally associated with Averett pottery. But Victory Drive pottery also contained some decorative techniques, chiefly punctate designs, that were not described by Chase as typical of Averett. There were similarities to pottery of the Upatoi complex, mainly in vessel form.

The Victory Drive Site

The Averett occupation at Victory Drive produced a narrow range of vessel forms and sizes. Vessel forms consisted primarily of medium sized bowls similar to those found on the type site of the Upatoi complex (Chase 1959b). These vessels are consistent with expectations for short term occupations, as contrasted with the greater diversity shown on more permanently occupied sites (see Figure 119).

The similarities between the Victory Drive pottery and both Averett and Upatoi types, as originally defined, indicate the need for further study. Our examination does not support the existence of distinctive pottery

characteristics that distinguish Upatoi pottery from Averett pottery. The Victory Drive site produced decorated pottery that differed from classic Averett motifs. These differences appear to represent no more than localized diversity in ceramic expression.

Radiocarbon dates confirm an Averett phase period of occupation for the pottery found at the Victory Drive site. These dates correspond to other radiocarbon dates acquired from area sites in recent years (Ledbetter 1995a). This securely dates the Averett phase of the Early Mississippian period between ca A.D. 900 and 1300 (Table 52, Figure 164).

Table 52. Averett Radiocarbon Dates from Columbus, Georgia area sites.

Site	Sample Number	Conventional Radiocarbon Age	Intercept of radiocarbon age with calendar date calibration curve	Calibrated results in calendar years at 1 sigma (68% probability)
9Me21 Carmouche	Beta 8961	1050 ± 80 B.P.	A.D. 1000	A.D. 905-1035
9Me21	Beta 8963	780 ± 60 B.P.	A.D. 1265	A.D. 1220-1285
9Me21	Beta 8964	930 ± 50 B.P.	A.D. 1055, 1090, 1150	A.D. 1030-1180
9Me21	Beta 9552	930 ± 80 B.P.	A.D. 1055, 1090, 1150	A.D. 1020-1215
9Me21	Beta 9554	1120 ± 60 B.P.	A.D. 960	A.D. 880-995
9Sw124 Florence	Beta 30026	1090 ± 70 B.P.	A.D. 980	A.D. 885-1015
9Sw124	Beta 30027	990 ± 60 B.P.	A.D. 1025	A.D. 1000-1150
9Sw124	Beta 30028	930 ± 80 B.P.	A.D. 1055, 1090, 1150	A.D. 1020-1215
9Me50 GoKart	Beta 78127	1020 ± 70 B.P.	A.D. 1015	A.D. 980-1040
9Me50	Beta 78128	820 ± 80 B.P.	A.D. 1235	A.D. 1170-1280
9Me50	Beta 78129	920 ± 50	A.D. 1065, 1075, 1155	A.D. 1035-1195

The following dates from these sites are omitted as too recent: 9Me21 samples Beta 9551 (520 ± 70 B.P.), and Beta 8962 (430 ± 50 B.P.); 9Ru9 (490 ± 60 B.P.).

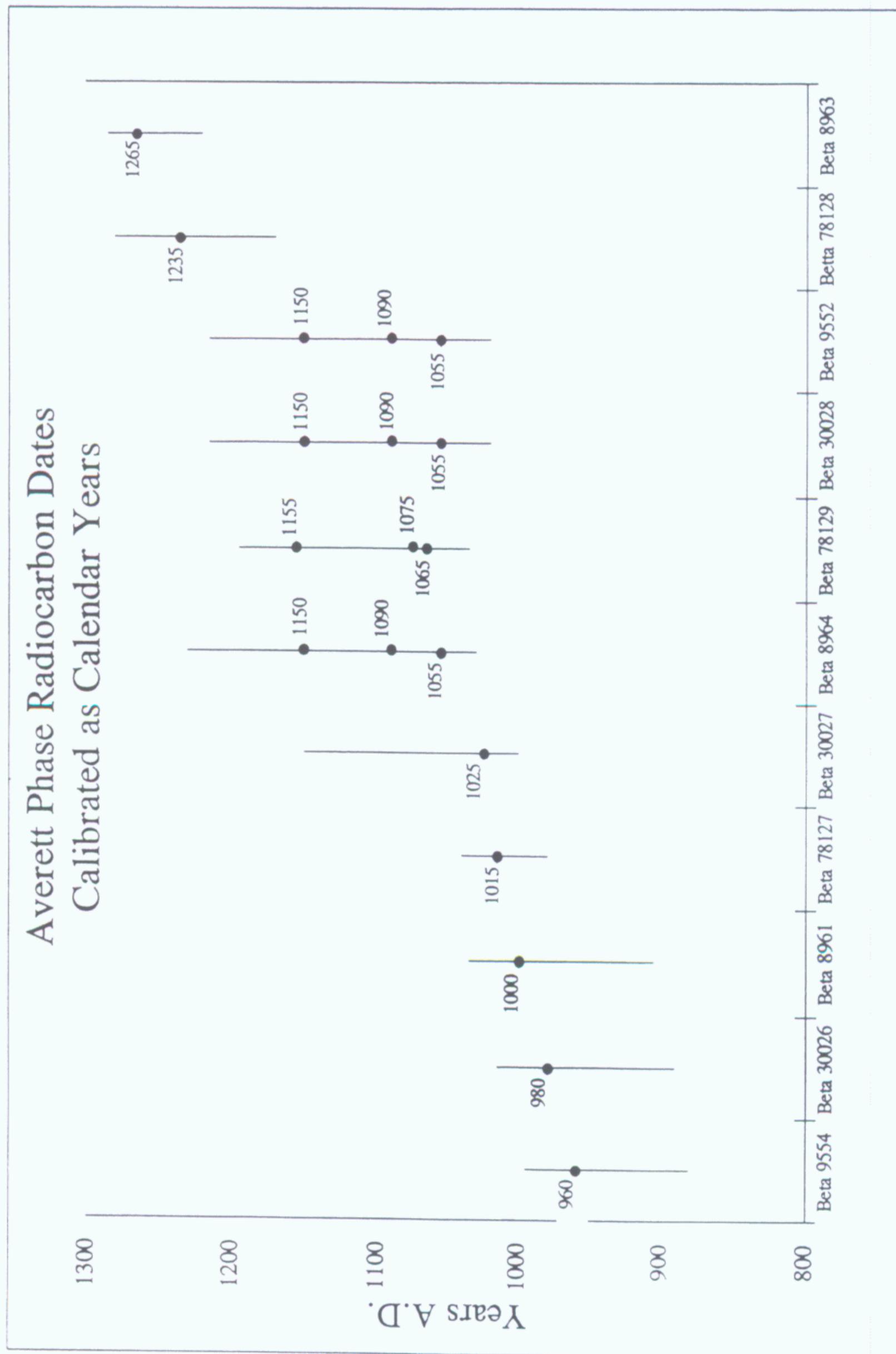


Figure 164. Graph illustrating calibrated radiocarbon dates for the Averett phase.

Bull Creek Phase Occupation

Data recovery investigations produced evidence of Late Mississippian Bull Creek phase occupation in the southwestern portion of the Victory Drive site. This evidence consists of postmolds and pits associated with a Bull Creek phase structure and a general scatter of Bull Creek phase ceramics along the length of the Riverwalk corridor. Bull Creek phase ceramics were most plentiful in the southern portion of the project area. The available data suggest the project area represents the northwestern portion of the settlement known as the Bull Creek Village (Patterson 1936, Lester 1938). An approximation of the boundaries of the Bull Creek village, based on all sources of archeological data, is shown in Figure 165.

A detailed account of investigations of the Bull Creek Village and Cemetery is presented in a separate report (Ledbetter 1995c). That report includes documentation of all research conducted on both the Bull Creek site (9Me1), and the Victory Drive site (9Me50).

Information recovered during the Riverwalk project survey of the Victory Drive and Bull Creek sites, coupled with excavation of a portion of the Victory Drive site during data recovery, produced important information for interpreting previous excavations of the Bull Creek phase occupation. The Riverwalk project field investigations contributed information relating to domestic structures and subsistence. The project also represented the first comprehensive survey of Bull Creek site.

The Bull Creek phase material remains in the project area have been examined in Chapters 11 and 12. That examination, which relates primarily to ceramics, summarizes much of the synthesis prepared as part of the separate Bull Creek site report (Ledbetter 1995c). Subsistence remains are discussed in Chapter 14.

The discovery of a concentration of postmolds interpreted to be a Bull Creek phase domestic structure is perhaps the most important contribution of data recovery with respect to this component (see Chapter 10). The pattern formed by the posts is essentially square and measures approximately 7 by 7 m. The structure contains large interior posts and a number of generally smaller interior posts that define interior partitions. Unfortunately, only the post patterns remained. There were no intact floor deposits.

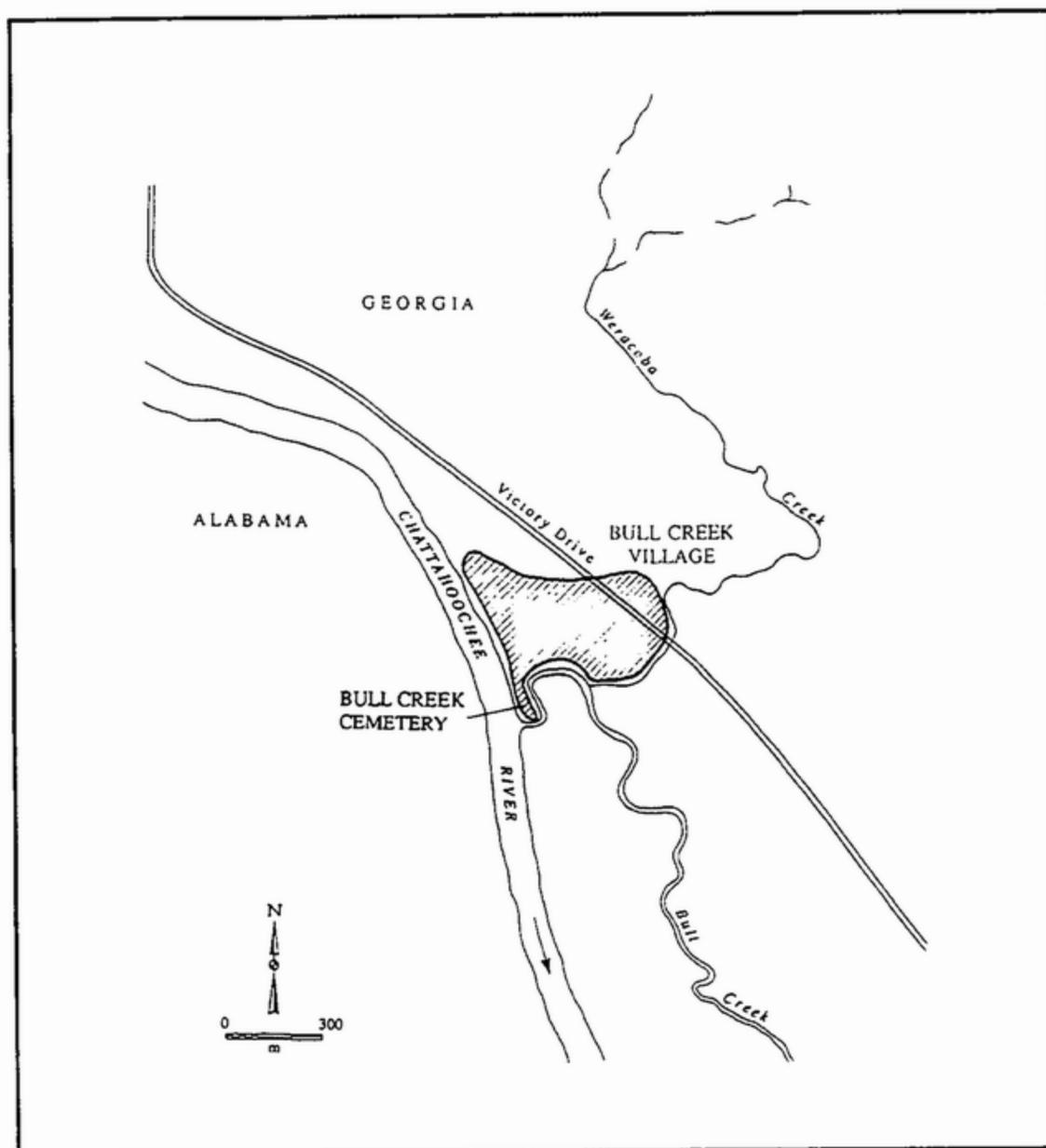


Figure 165. Map showing approximate boundaries of the Bull Creek Village.

The structure found during data recovery is comparable in size and shape to the two structures excavated by Lester on the Bull Creek site (Lester 1938). Those structures retained floor deposits, containing broken vessels covered by fired clay that originally formed the walls of the structures. Any floor deposits originally present in the structure found during data recovery had been removed through plowing and more recent landscaping.

While the present project contributed to our understanding of the Bull Creek phase occupation, there are still substantial gaps remaining in attempts to interpret most aspects of the settlement. Because most of the village area was destroyed prior to an adequate survey, the exact limits and layout of the village remain unknown. An examination of available notes and manuscripts does indicate a discrete cemetery area on the site (see Figure 165). There is no available evidence for the presence of mounds or ceremonial structures. The available data are insufficient to determine the layout of the village. As a result of past investigations, it does appear that domestic structures spread out along the bluffs of the Chattahoochee River and Weracoba Creek for nearly half a kilometer to the north and east. While testing by Chase and others (see Chapter 3) noted the existence of midden deposits in the interior area of the site, domestic structures were never confirmed.

A failure of all investigations has been the procurement of charcoal samples capable of providing reliable radiocarbon dates. One extremely small sample was submitted from a Bull Creek phase feature found in Block D but the date was not in the Bull Creek phase time range (see Chapter 10). A sample of charcoal recovered during the WPA excavations had previously been submitted for data with unacceptable results (Frank Schnell, Jr., personal communication, 1995). An absence of reliable radiocarbon dates from the Bull Creek phase type site remains a

critical factor affecting interpretation of the cultural history of the region.

Lawson Field Occupation

The Victory Drive site was originally defined as the location of a spatially extensive, ca A.D. 1800 Creek settlement (Schnell 1970). Schnell somewhat arbitrarily defined the site's boundaries to enclose features from sites previously known as the Go-Kart and Dolly Madison sites. Schnell noted that the boundaries of the Victory Drive site partially overlapped the boundaries Bull Creek site (Schnell 1970). As a result of data recovery, the limits of the Creek occupation have been further defined to include the area shown in Figure 166.

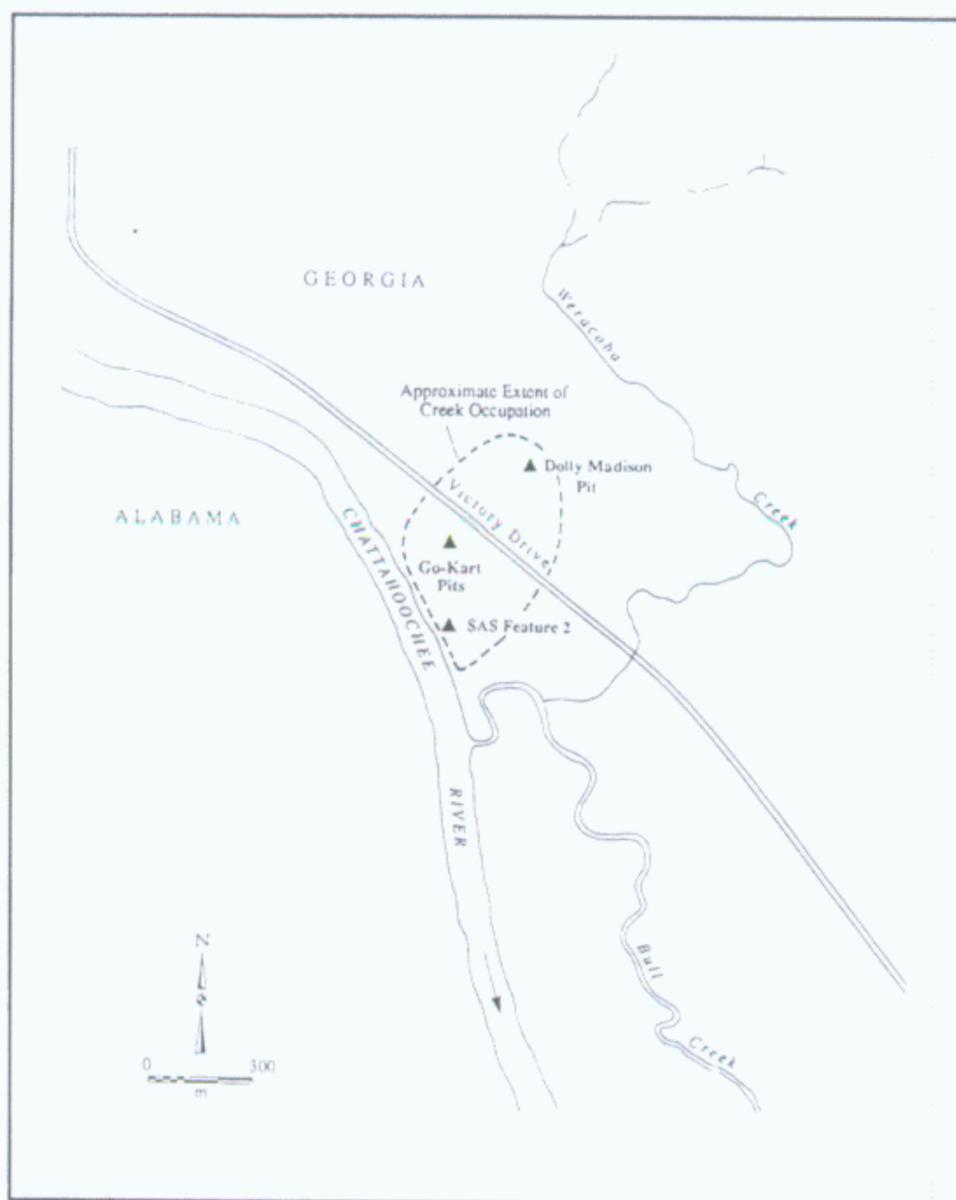


Figure 166. Map showing approximate boundaries of the Lawson Field phase settlement of the Victory Drive site.

During data recovery, relatively small numbers of Creek artifacts were recovered from plowzone deposits. Most Creek material was recovered from a single, large, trash-filled pit in Block B (see Chapter 9). That feature produced large collections of aboriginal ceramics and subsistence remains that could be compared to material recovered from similar pits previously excavated on the site (Schnell 1970). A description of the Lawson Field phase pottery from all features is presented in Chapter 12 and Appendix A. The ceramic study focused upon vessel form. This provided a means for characterizing ceramic vessel forms on a site-wide level and a method for examining difference that existed in three households dispersed across the site. Vessel forms from the three areas were generally comparable.

Through the use of fine screening, a substantial amount of subsistence remains was recovered from the pit excavated during data recovery. Additional subsistence material was studied from the previously excavated pits. The detailed analysis of this material provides some of the first quantifiable subsistence data for the Lawson Field phase. This allows direct comparisons of many aspects of Creek diets to that of other aboriginal populations (see Chapter 14) and should provide valuable comparative data for future Lawson Field phase excavations.

Our study of the Lawson Field phase component is restricted to a few large pits. There is little information available on other feature types or any indication of the density of structures on the site. Because the most common shelter at the time of occupation was a log cabin, subsurface remains would have been limited to a few feature types, such as the large trash-filled pits. There is no historic documentation of a village. However, the earliest designation of Weracoba Creek as "Town Creek" may imply the existence of a large settlement. Further archival research may provide more information on this matter.

Euro-American Landuse

Relatively little archeological data was procured concerning the early to mid-nineteenth century use of the Victory Drive site. Artifacts, primarily ceramics, were recovered from plowzone deposits which dated to the first half of the nineteenth century. Features dating to the period were not found. Based upon historic documentation, the primary use of the area appears to have been agricultural.

The possible existence of a ferry that operated in the early 1830s was examined in Chapter 1. According to Patterson's (1937) interpretations, a ferry was established in 1831 by Seaborn Jones and Stephen M. Ingersoll (Martin 1874:29). The approximate location of the ferry is shown on Patterson's field maps of the WPA-period Bull Creek excavations (see Figure 10). Data recovery investigations provided some supporting evidence for the ferry. Ceramics dating to the period were recovered from the site. Archival research documented the ownership of the property by Seaborn Jones during the period. Transactions noted on the original land grants show that Seaborn Jones acquired Land Lots 64 and 67 from John Woolfolk on August 13, 1829 (Files of the Office of the Surveyor General, Georgia Department of Archives and History). While other records relating to transactions of Jones for the property have not been found, there was no evidence found to refute Patterson's view.

During the early twentieth century a railroad bed and bridge were constructed across portions of the Victory Drive and Bull Creek sites. The elevated railroad bed and trestle were built across the mouth of Bull Creek in 1926 by the Columbus Brick and Tile Company to transport clay from pits south of the creek to their plant. The bridge washed away during a flood the following year (Patterson 1950:37). Borrowing of fill dirt for construction disturbed substantial portions of the sites.

During the mid-twentieth century, the project area contained a race track complex and was subsequently used for other forms of recreation, such as a driving range and Go-Kart track. For a short time, the project area was also the location of a river freight company owned by Thurston Crawford.

Remains of concrete foundations, a metal stairway leading down to the river, and a scuttled tug boat still remain in the project area as evidence of Crawford's business. According to research by John Lupold, Crawford built a Florida-style office building near the river in 1950. During the period, Crawford's used three tow boats, *The Scintilla*, *The*

Swamp Angel, and *The Shamrock* to move different types of cargo with salt being the primary type of freight. The tugboat that presently lies in the river below the site is the *Scintilla*, a boat built by Ingall's Ship Building at Pascagoula, Mississippi.

Crawford's enterprise represents the last period of archeological consequence on the Victory Drive site. During the past two decades, the site has been drastically modified by commercial development. The Riverwalk project represents the most recent impact to the site. Current plans are to preserve the narrow strip of woods at the bluff's edge, which should protect the remaining intact portion of the site.

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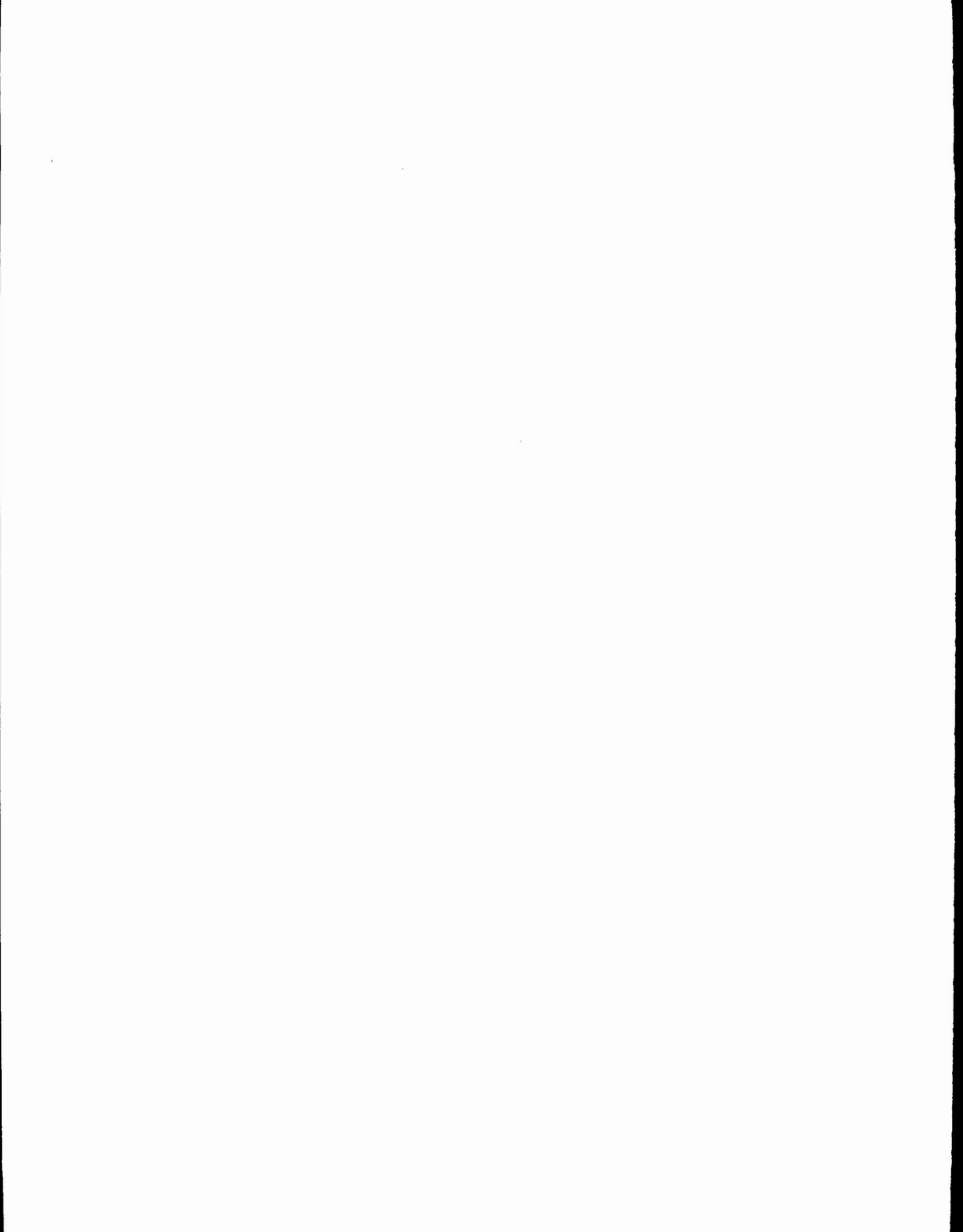
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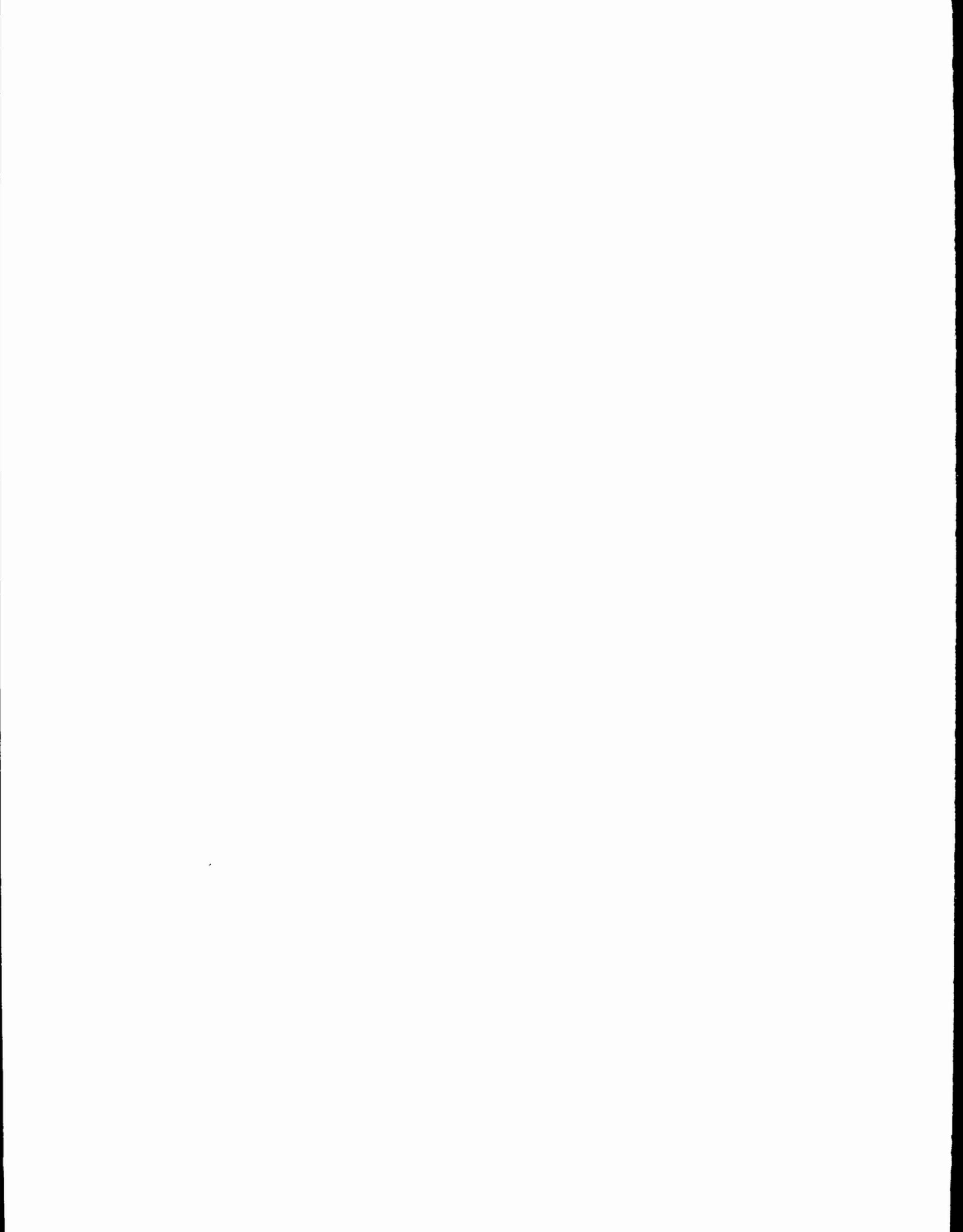
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APPENDIX A
Lawson Field Phase Vessel Form Data



Flaring Rim Jars

Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
8	Dolly Madison	24 cm	Flaring Rim (punctate)	Brushed
13	Dolly Madison	22 cm	Applied Strip (pinched)	Brushed
15	Dolly Madison	42 cm	Applied Strip (pinched)	Brushed
19	Dolly Madison	36 cm	Flaring Rim (pinched)	Brushed
26	Dolly Madison	48 cm	Flaring Rim (punctate)	Brushed
29	Dolly Madison	18 cm	Flaring Rim (punctate)	Brushed
30	Dolly Madison	36 cm	Flaring Rim (punctate)	Brushed
31	Dolly Madison	42 cm	Flaring Rim (punctate)	Brushed
32	Dolly Madison	18 cm	Flaring Rim (punctate)	Brushed
33	Dolly Madison	30 cm	Flaring Rim (punctate)	Brushed
34	Dolly Madison	42 cm	Applied Strip (pinched)	Brushed
35	Dolly Madison	26 cm	Flaring Rim (punctate)	Brushed
36	Dolly Madison	20 cm	Flaring Rim (punctate)	Brushed
40	Dolly Madison	30 cm	Applied Strip (pinched)	Brushed
41	Dolly Madison	32 cm	Applied Strip (pinched)	Brushed
42	Dolly Madison	40 cm	Applied Strip (pinched)	Brushed
43	Dolly Madison	18 cm	Applied Strip (pinched)	Brushed
44	Dolly Madison	30 cm	Applied Strip (pinched)	Brushed
45	Dolly Madison	20 cm	Applied Strip (pinched)	Brushed
46	Dolly Madison	36 cm	Applied Strip (pinched)	Brushed
47	Dolly Madison	38 cm	Applied Strip (pinched)	Brushed
48	Dolly Madison	36 cm	Applied Strip (pinched)	Brushed
49	Dolly Madison	18 cm	Flaring Rim (plain)	Brushed
50	Dolly Madison	18 cm	Flaring Rim (plain)	Brushed
51	Dolly Madison	42 cm	Applied Strip (pinched)	Brushed
52	Dolly Madison	44 cm	Applied Strip (pinched)	Brushed
53	Dolly Madison	34 cm	Applied Strip (pinched)	Brushed
54	Dolly Madison	38 cm	Applied Strip (pinched)	Brushed
55	Dolly Madison	44 cm	Applied Strip (pinched)	Brushed
56	Dolly Madison	30 cm	Applied Strip (pinched)	Brushed

Flaring Rim Jars				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
57	Dolly Madison	38	Applied Strip (pinched)	Brushed
58	Dolly Madison	36 cm	Applied Strip (pinched)	Brushed
70	SAS	32 cm	Applied Strip (pinched)	Brushed
71	SAS	42 cm	Applied Strip (pinched)	Brushed
72	SAS	28 cm	Applied Strip (pinched)	Brushed
73	SAS	36 cm	Applied Strip (pinched)	Brushed
76	SAS	26 cm	Applied Strip (pinched)	Brushed
77	SAS	30 cm	Applied Strip (pinched)	Brushed
79	SAS	40 cm	Applied Strip (pinched)	Plain
80	SAS	20 cm	Applied Strip (pinched)	Plain
81	Go-Kart	28 cm	Applied Strip (notched)	Brushed
82	Go-Kart	28 cm	Flaring Rim (notched)	Brushed
83	Go-Kart	26 cm	Flaring Rim (notched)	Brushed
84	Go-Kart	24 cm	Flaring Rim (notched)	Brushed
85	Go-Kart	30 cm	Flaring Rim (notched)	Cob Marked?
86	Go-Kart	24 cm	Applied Strip (pinched)	Brushed
87	Go-Kart	24 cm	Applied Strip (pinched)	Brushed
88	Go-Kart	34 cm	Applied Strip (pinched)	Brushed
89	Go-Kart	42 cm	Applied Strip (pinched)	Brushed
90	Go-Kart	26 cm	Applied Strip (pinched)	Brushed
91	Go-Kart	34 cm	Applied Strip (pinched)	Brushed

Bottles				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
10	Dolly Madison	10 cm	Plain	Plain
68	SAS	8 cm	Notched	Plain
69	SAS	9 cm	Pinched	Plain

Large Shallow Bowls				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
37	Dolly Madison	36 cm	Applied Strip (pinched)	Brushed
38	Dolly Madison	40 cm	Applied Strip (pinched)	Plain
39	Dolly Madison	40 cm	Applied Strip (pinched)	Brushed
78	SAS	42 cm	Applied Strip (pinched)	Plain

Open Bowls				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
1	Dolly Madison	30 cm	Flaring	Burnished*
2	Dolly Madison	28 cm	Thickened	Incised
3	Dolly Madison	16 cm	Simple	Red Filmed
4	Dolly Madison	22 cm	Flanged	Burnished
5	Dolly Madison	32 cm	Flaring	Burnished*
9	Dolly Madison	16 cm	Flanged	Burnished
14	Dolly Madison	14 cm	Simple	Burnished
17	Dolly Madison	26 cm	Thickened	Burnished
18	Dolly Madison	30 cm	Thickened	Burnished
20	Dolly Madison	26 cm	Rolled	Burnished
21	Dolly Madison	20 cm	Thickened	Burnished
22	Dolly Madison	30 cm	Thickened	Incised
23	Dolly Madison	28 cm	Thickened	Burnished
25	Dolly Madison	20 cm	Rolled	Plain
27	Dolly Madison	24 cm	Flanged	Burnished
28	Dolly Madison	30 cm	Flanged	Burnished*
59	SAS	18 cm	Flaring	Burnished
60	SAS	20 cm	Simple	Plain
61	SAS	24 cm	Flaring	Burnished
62	SAS	20 cm	Simple	Burnished
63	SAS	30 cm	Flaring	Burnished

Open Bowls				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
65	SAS	20 cm	Flaring	Incised
66	SAS	26 cm	Flaring	Burnished
67	SAS	12 cm	Simple	Plain
74	SAS	16 cm	Flaring	Brushed
93	Go-Kart	30 cm	Flaring	Incised
94	Go-Kart	30 cm	Flaring	Plain
95	Go-Kart	24 cm	Rolled	Incised

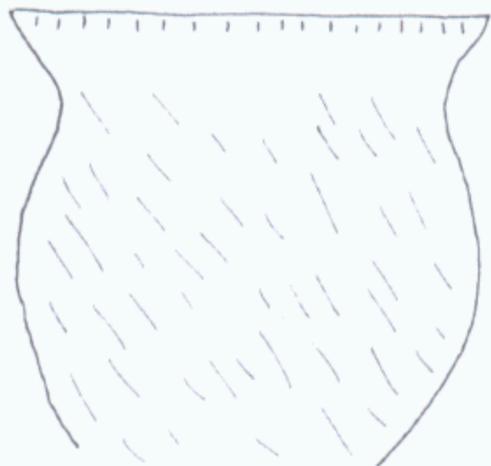
*Incised Interior

Casuela				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
7	Dolly Madison	30 cm	Simple	Incised
11	Dolly Madison	24 cm	Thickened	Red Filmed
24	Dolly Madison	32 cm	Simple	Incised
98	Dolly Madison	32 cm	Thickened	Incised
64	SAS	36 cm	Thickened	Incised
75	SAS	36 cm	Simple	Red Painted
92	Go-Kart	28 cm	Simple	Engraved
96	Go-Kart	30 cm	Simple	Incised
97	Go-Kart	no diameter	Simple	Red Filmed

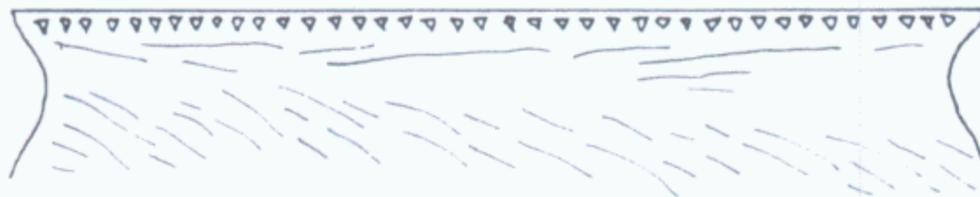
Small Bowls-Cups				
Vessel Number	Collection	Rim Diameter	Rim Modification	Body Decoration
6	Dolly Madison	10 cm	Simple	Brushed
12	Dolly Madison	6 cm	Simple	Brushed
16	Dolly Madison	8 cm	Simple	Roughened

Flaring Rim Jars

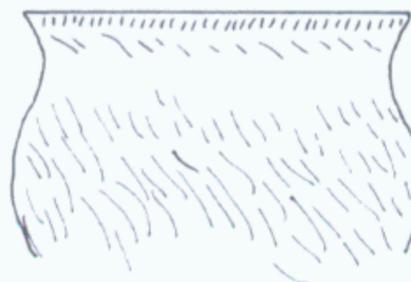
Vessel 8 (Dolly Madison)



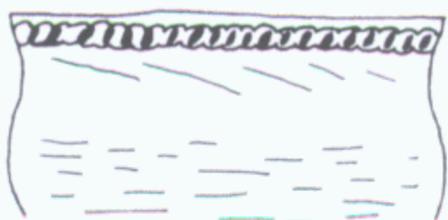
Vessel 26 (Dolly Madison)



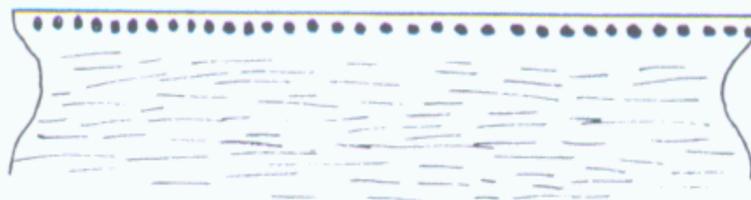
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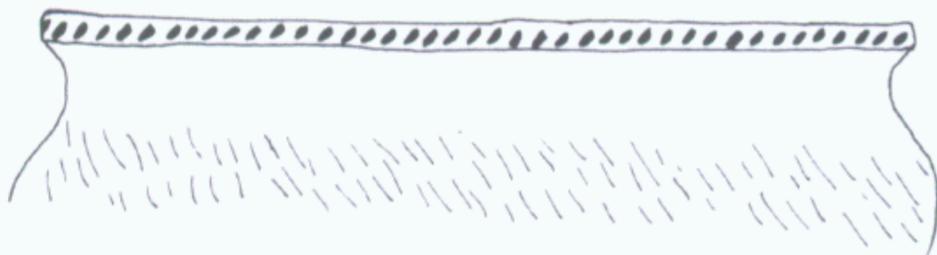
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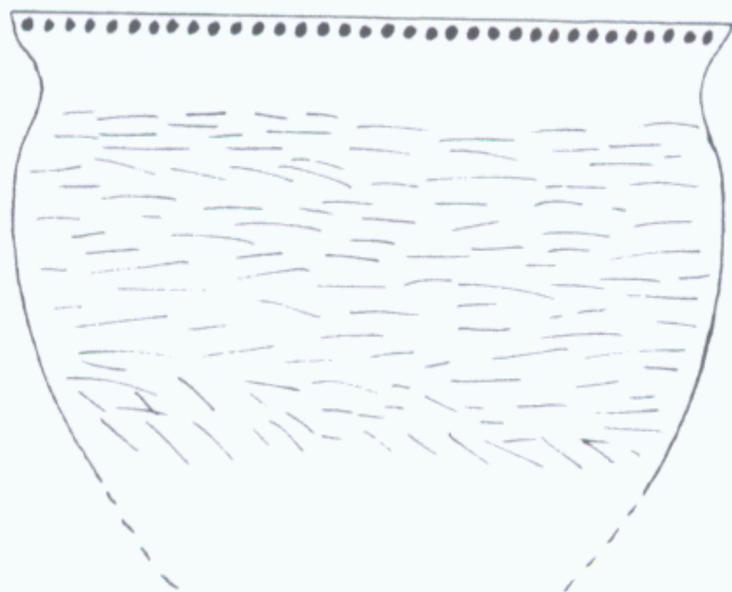
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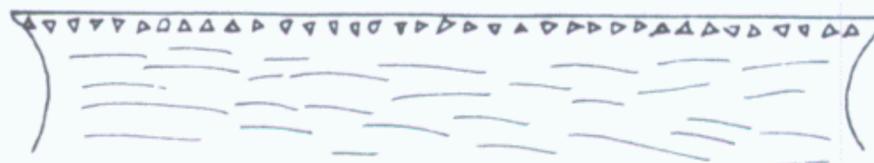
Vessel 15 (Dolly Madison)



Vessel 19 (Dolly Madison)



Vessel 31 (Dolly Madison)



Vessel 32 (Dolly Madison)

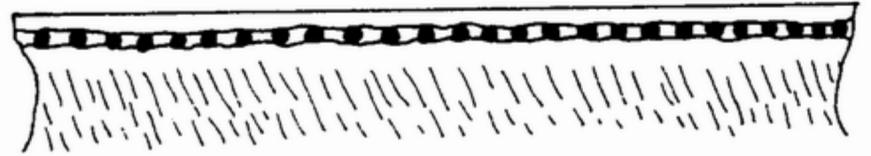


Flaring Rim Jars

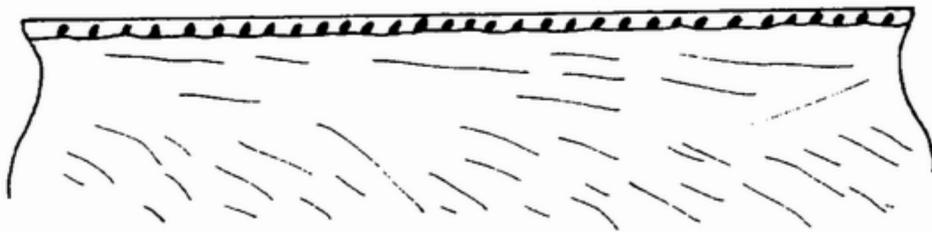
Vessel 33 (Dolly Madison)



Vessel 42 (Dolly Madison)



Vessel 34 (Dolly Madison)



Vessel 43 (Dolly Madison)



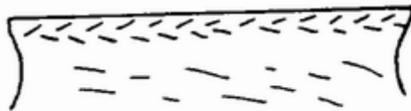
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Vessel 44 (Dolly Madison)



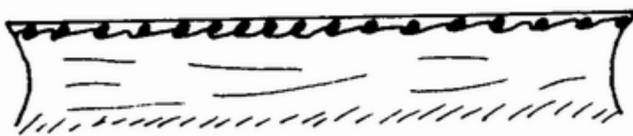
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Vessel 45 (Dolly Madison)



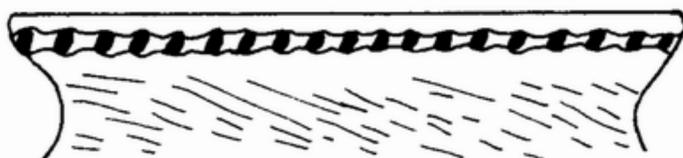
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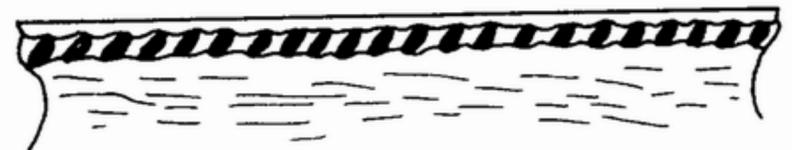
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Vessel 41 (Dolly Madison)

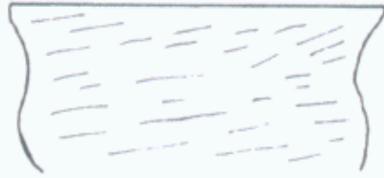


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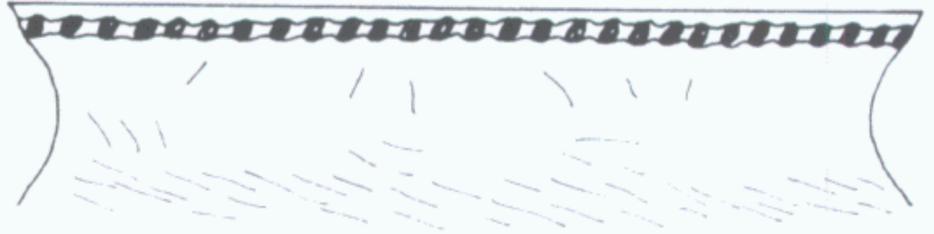


Flaring Rim Jars

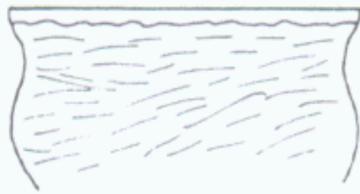
Vessel 49 (Dolly Madison)



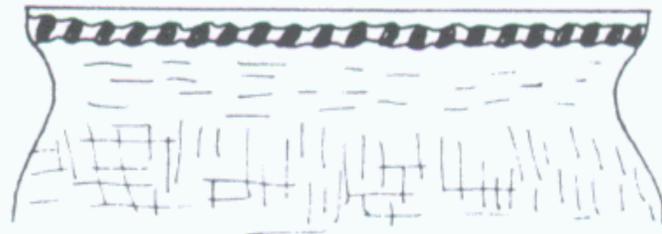
Vessel 55 (Dolly Madison)



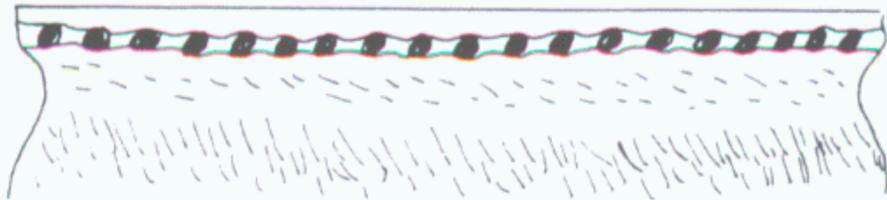
Vessel 50 (Dolly Madison)



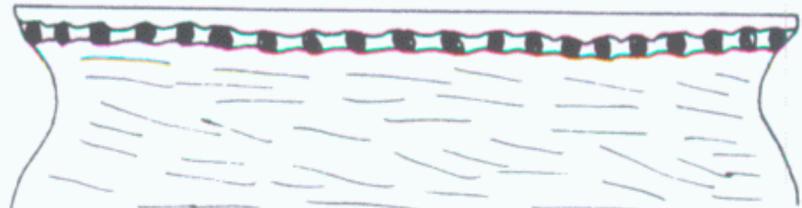
Vessel 56 (Dolly Madison)



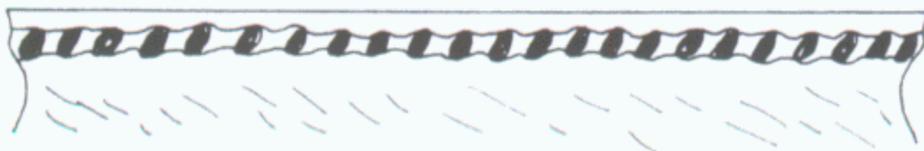
Vessel 51 (Dolly Madison)



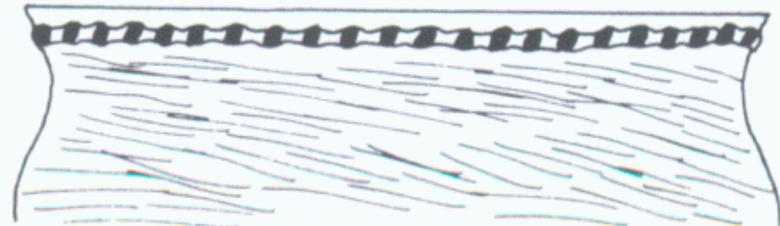
Vessel 57 (Dolly Madison)



Vessel 52 (Dolly Madison)



Vessel 58 (Dolly Madison)



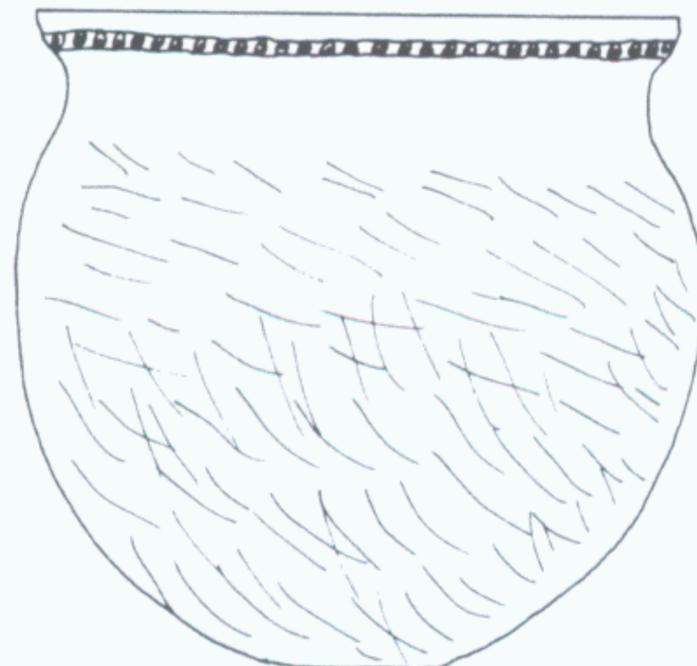
Vessel 53 (Dolly Madison)



Vessel 54 (Dolly Madison)

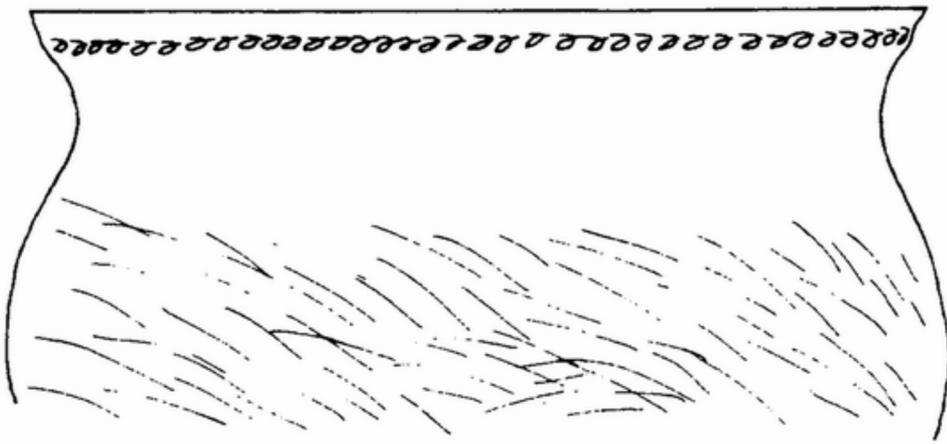


Vessel 70 (SAS F.2)



Flaring Rim Jars

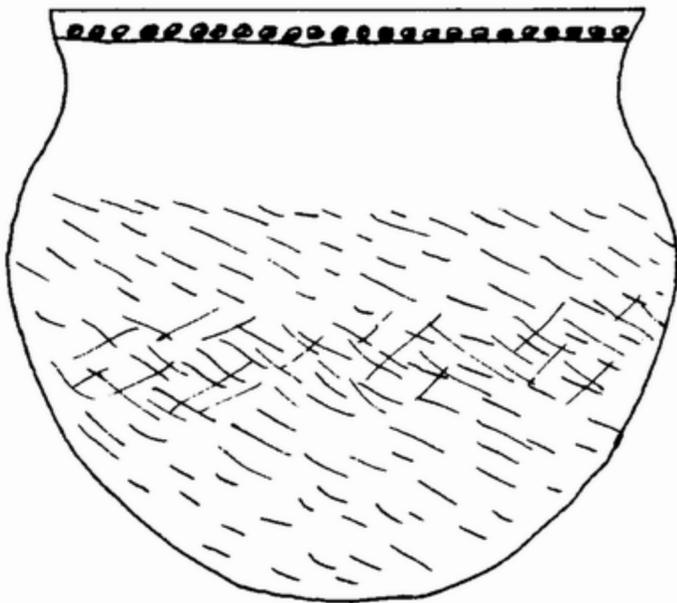
Vessel 71 (SAS F.2)



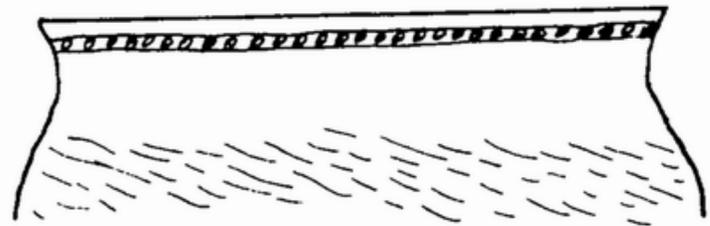
Vessel 76 (SAS F.2)



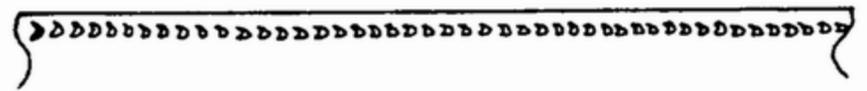
Vessel 72 (SAS F.2)



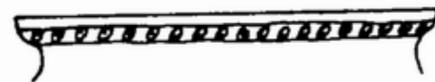
Vessel 77 (SAS F.2)



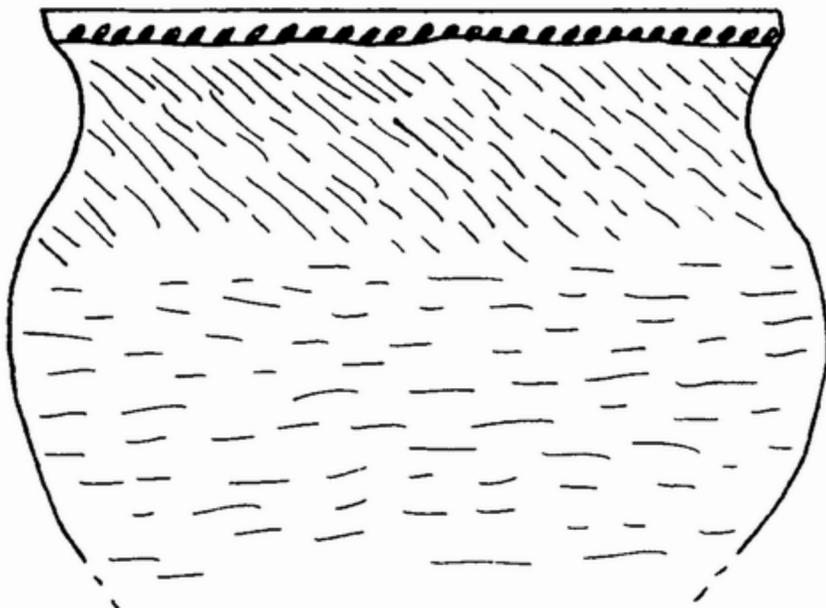
Vessel 79 (SAS F.2)



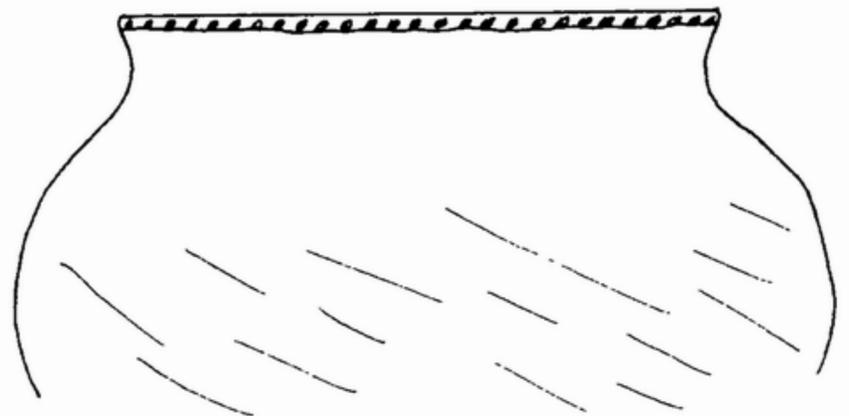
Vessel 80 (SAS F.2)



Vessel 73 (SAS F.2)

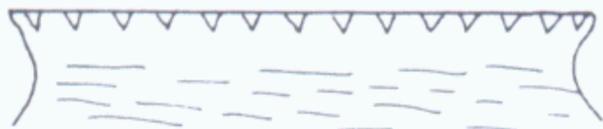


Vessel 81 (Go-Kart)

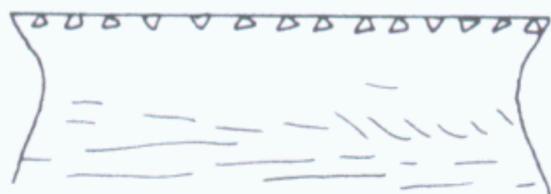


Flaring Rim Jars

Vessel 82 (Go-Kart)



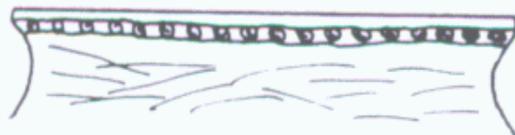
Vessel 83 (Go-Kart)



Vessel 84 (Go-Kart)



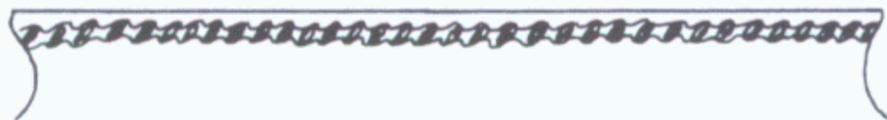
Vessel 87 (Go-Kart)



Vessel 88 (Go-Kart)



Vessel 89 (Go-Kart)



Vessel 90 (Go-Kart)

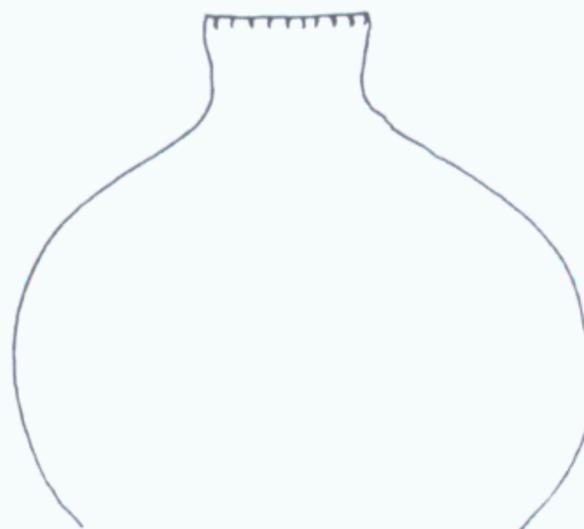


Bottles

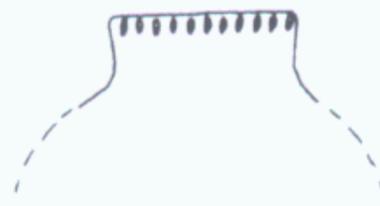
Vessel 10 (Dolly Madison)



Vessel 68 (SAS F.2)

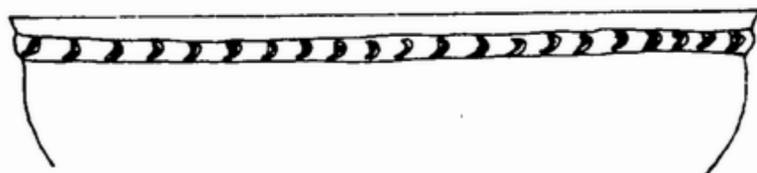


Vessel 69 (SAS F.2)

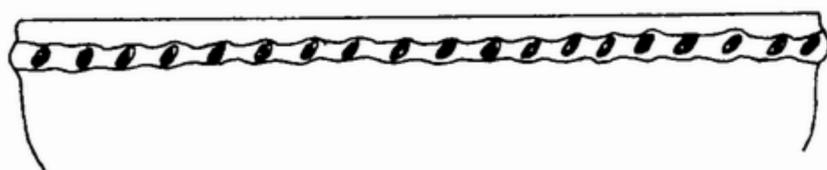


Large Shallow Bowls

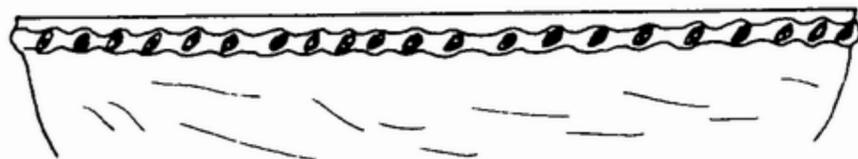
Vessel 37 (Dolly Madison)



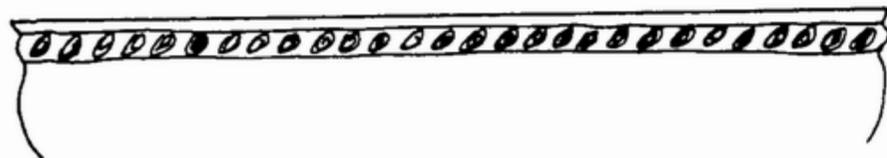
Vessel 38 (Dolly Madison)



Vessel 39 (Dolly Madison)

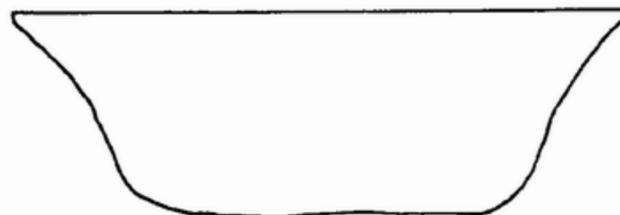


Vessel 78 (SAS F.2)

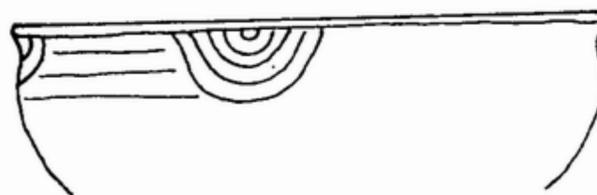


Open Bowls

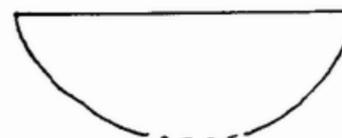
Vessel 1 (Dolly Madison)



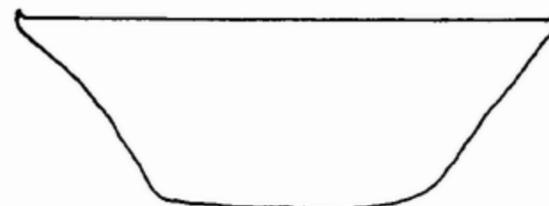
Vessel 2 (Dolly Madison)



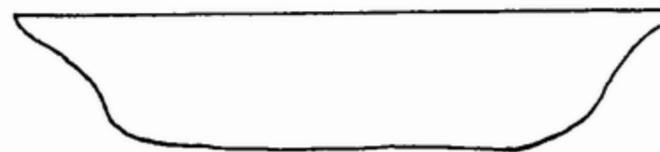
Vessel 3 (Dolly Madison)



Vessel 4 (Dolly Madison)



Vessel 5 (Dolly Madison)



Vessel 9 (Dolly Madison)



Vessel 14 (Dolly Madison)



Open Bowls

Vessel 17 (Dolly Madison)



Vessel 18 (Dolly Madison)



Vessel 20 (Dolly Madison)



Vessel 21 (Dolly Madison)



Vessel 22 (Dolly Madison)



Vessel 23 (Dolly Madison)



Vessel 25 (Dolly Madison)



Vessel 27 (Dolly Madison)



Vessel 28 (Dolly Madison)



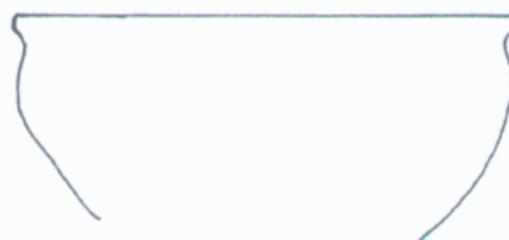
Vessel 59 (SAS F.2)



Vessel 60 (SAS F.2)



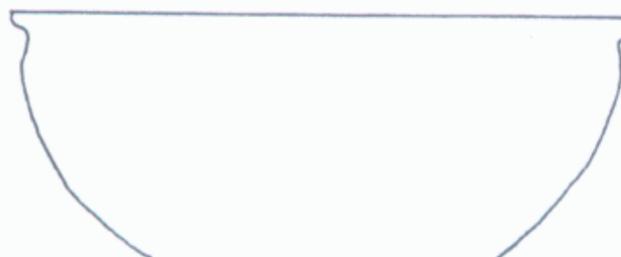
Vessel 61 (SAS F.2)



Vessel 62 (SAS F.2)

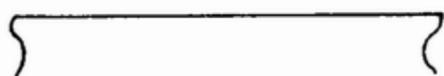


Vessel 63 (SAS F.2)

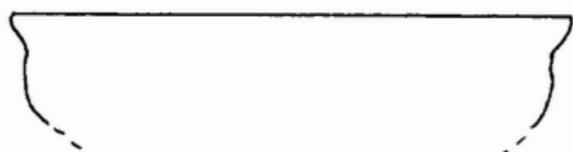


Open Bowls

Vessel 65 (SAS F.2)



Vessel 66 (SAS F.2)



Vessel 67 (SAS F.2)

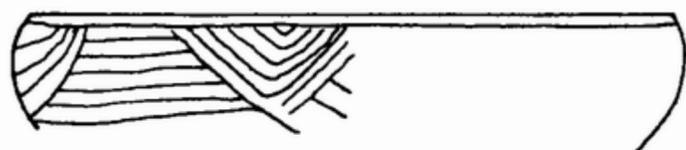


Vessel 74 (SAS F.2)

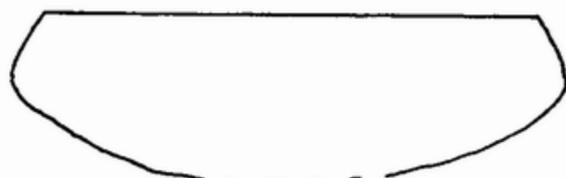


Carinated (Casuela) Bowls

Vessel 7 (Dolly Madison)



Vessel 11 (Dolly Madison)

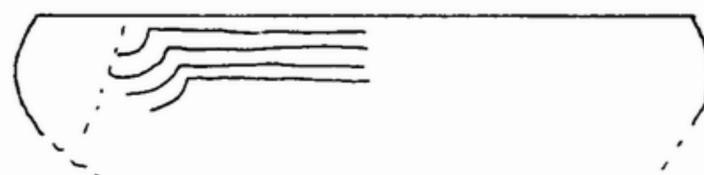


Vessel 98 (Dolly Madison)

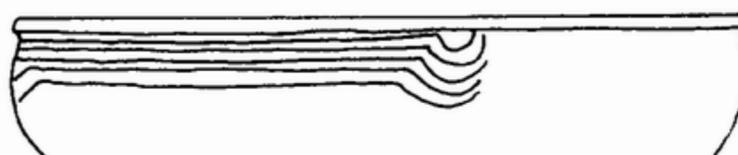


Carinated (Casuela) Bowls

Vessel 24 (Dolly Madison)



Vessel 64 (SAS F.2)



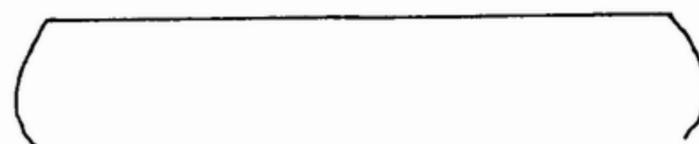
Vessel 75 (SAS F.2)



Vessel 92 (Go-Kart)

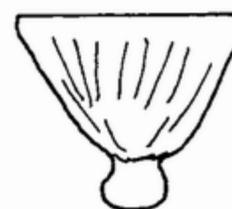


Vessel 96 (Go-Kart)



Cups (Dolly Madison)

Vessel 6



Vessel 12



Vessel 16

