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Caddo Ceramic Assemblages from Sites in the Ayish and Palo Gaucho Bayou Basins, San Augustine County, Texas

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Caddo Ceramic Assemblages from Sites in the Ayish and Palo Gaucho Bayou Basins, San Augustine County, Texas

Timothy K. Perttula

Introduction

In 1939 and 1940, G. E. Arnold recorded a number of archaeological sites in and around San Augustine, in East Texas, as part of a Works Progress Administration-funded (WPA) archaeological survey of East Texas. The eight sites of concern in this article are in either the Ayish Bayou or Palo Gaucho Bayou basins; the former is a southward-flowing tributary to the Angelina River, while the latter is a southeast-flowing tributary to the Sabine River (Figure 1).

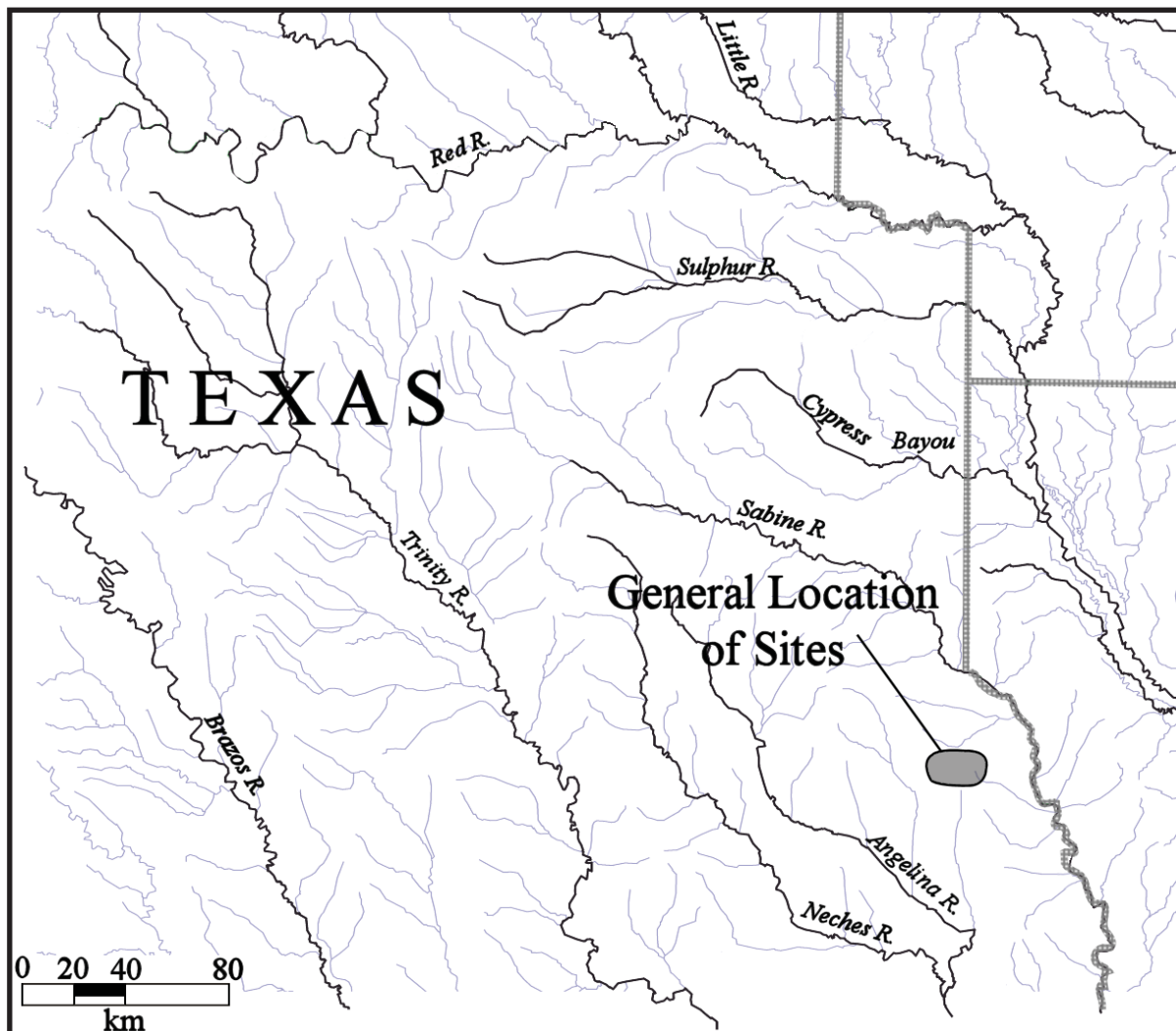


Figure 1. General location of the ancestral Caddo sites discussed in this article.

In several instances, depending upon the circumstances, Arnold was able to collect substantial numbers of ancestral Caddo ceramic and lithic artifacts from several of these sites. The character of these ceramic sherds—and their stylistic and technological similarities or differences to the ceramic assemblages from the 1716-1719, 1722-1773 Mission Dolores de los Ais in San Augustine (see Carlson and Corbin 1999; Carlson and Quinn 1996; Corbin et al. 1980, 1990; Marceaux 2011) as well as other known sites on Palo Gaicho and Housen bayous (Perttula 2015a) and Attoyac Bayou (Marceaux 2011; Perttula 2015b)—are the primary focus of the analysis reported on herein, but other temporally diagnostic ceramic and lithic artifacts are discussed as well.

Ayish Bayou Sites

41SA27

There are 13 ceramic vessel sherds in the collections from 41SA27, seven plain body sherds and six decorated body and rim sherds. These sherds are from grog-tempered ($n=9$, 69 percent), grog-bone-tempered ($n=2$, 15 percent), and bone-tempered ($n=2$, 15 percent) vessels.

Five of the decorated sherds are from utility wares, including two body sherds with parallel or horizontal brushing marks, and two body sherds with parallel or straight incised lines. The one utility ware rim sherd has at least three horizontal incised zones each filled with a single row of tool punctations (Figure 2a).

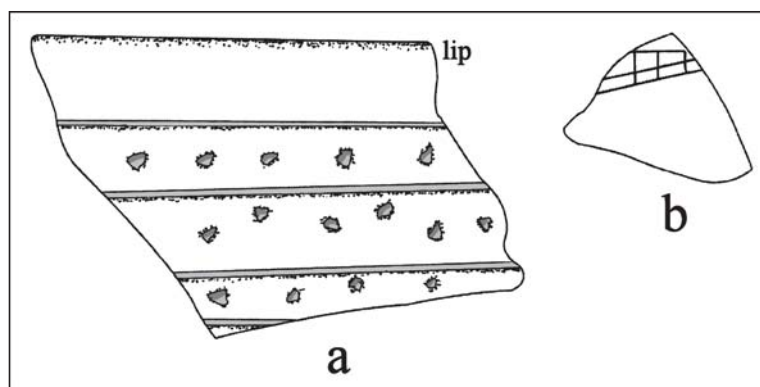


Figure 2. Selected decorative elements on sherds from 41SA27.

The one fine ware body sherd from 41SA27 has a triangular or rectilinear-shaped narrow zone filled with cross-hatched engraved lines (see Figure 2b).

In addition to the ceramic sherds, there are several arrow points and arrow point preforms in the assemblage from 41SA27. This includes three Perdiz arrow points made from local raw materials (yellowish-brown and red chert and petrified wood) and a reddish-brown oval-shaped arrow point preform.

41SA37

The 14 sherds in the WPA collections from 41SA37 are either grog-tempered ($n=11$, 79 percent) or bone-tempered ($n=3$, 21 percent) body sherds. Six of the body sherds are plain or undecorated. The other eight sherds are from jars that have parallel brushing marks.

A single Gary dart point is in the 41SA37 collection. It is made from a local brown chert.

Palo Gaucho Bayou Sites

41SA26

The ceramic vessel sherd assemblage from 41SA26 has 58 sherds, 34 that are plain and 24 that have decorative elements; the plain to decorated sherd ratio is 1.42. Approximately 44 percent of the sherds are from grog-tempered vessels, 36 percent are from bone-tempered vessels, and the remaining 19 percent of the sherds are from vessels with grog and bone temper inclusions.

The decorated sherds include both utility wares and fine wares (Table 1). The utility wares comprise 75 percent of the decorated sherds from 41SA26, and this includes sherds with brushed (29 percent of the decorated sherds), incised (21 percent), incised-punctated (4 percent, Figure 3a), pinched-punctated (4 percent, Figure 3b), and punctated (17 percent) decorative elements.

Table 1. Decorative methods and elements in the utility ware and fine ware sherds from 41SA26.

Decorative method and elements	Rim	Body	N
<u>Utility ware</u>			
<i>Brushed</i>			
horizontal-diagonal brushing marks	1	-	1
parallel brushing marks	-	6	6
<i>Incised</i>			
opposed incised lines	-	1	1
parallel incised lines	-	4	4
<i>Incised-Punctated</i>			
horizontal and vertical tool punctated rows and diagonal incised lines	-	1	1
<i>Pinched-Punctated</i>			
diagonal opposed tool punctated rows and vertical row of pinched ridges	-	1	1
<i>Punctated</i>			
circular punctated row	-	1	1
tool punctated rows	-	3	3
<u>Fine ware</u>			
<i>Engraved</i>			
curvilinear engraved lines, closely-spaced	-	1	1
curvilinear engraved lines, widely-spaced	-	1	1
diagonal opposed engraved lines	-	1	1
horizontal engraved line	1	-	1
parallel lines and hatched circle el.	-	1	1
straight engraved line	-	1	1
Totals	2	22	24

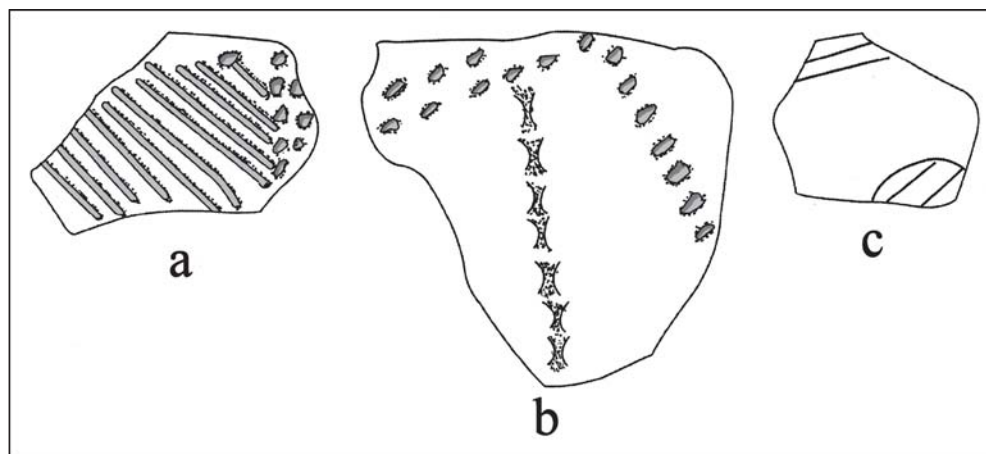


Figure 3. Selected decorative elements on sherds from 41SA26.

The fine ware sherds are all from engraved vessels (see Table 1), including at least one carinated bowl with a diagonal opposed engraved element. The decorative elements include both curvilinear and geometric-based lines, and one body sherd has both parallel engraved lines and an associated hatched circle element (see Figure 3c).

41SA43

The 23 ceramic sherds from 41SA43 include sherds from both Woodland and Caddo vessels. The two Woodland period body sherds are from sandy paste Goose Creek Plain vessels, and the remaining 21 sherds are Caddo ceramic wares. These are from grog-tempered ($n=17$, 81 percent), grog-bone-tempered ($n=2$, 9.5 percent), and bone-tempered ($n=2$, 9.5 percent) vessels.

Six sherds in the 41SA26 collection are decorated, all from utility wares. Two are body sherds with parallel brushing marks, three body sherds have rows of tool punctations, and one lower rim-body sherd has incised and brushed decorative elements. This sherd is from a grog-tempered jar that has horizontal incised lines on the rim and vertical brushing marks on the vessel body.

There are several chipped stone tools in the 41SA43 collection. They include a straight-stemmed Alba arrow point made from a local yellowish-red chert, a petrified wood Gary dart point (associated with the Goose Creek Plain sherds), a petrified wood ovate biface, and an expanding stem dart point with a flat base, also made from petrified wood.

Also present at the site are two Middle Archaic period dart points: a Calf Creek point stem made from a non-local and lustrous dark gray chert and a White River side-notched point made from a non-local brown jasper. These two points suggest an occupation here sometime between 6200-5800 years B.P. (Pertulla 2013).

41SA44

There are only 24 ceramic vessel sherds in the WPA collections from 41SA44: one Woodland period sandy paste Goose Creek Plain body sherd and 23 sherds from Caddo vessels. The Caddo sherds are from grog-tempered vessels.

The three decorated body sherds in the assemblage are from utility wares. One has opposed brushing marks, another has a row of fingernail punctations, and the third, possibly from a Maydelle Incised vessel, has a incised zone filled with rows of tool punctations (Figure 4).

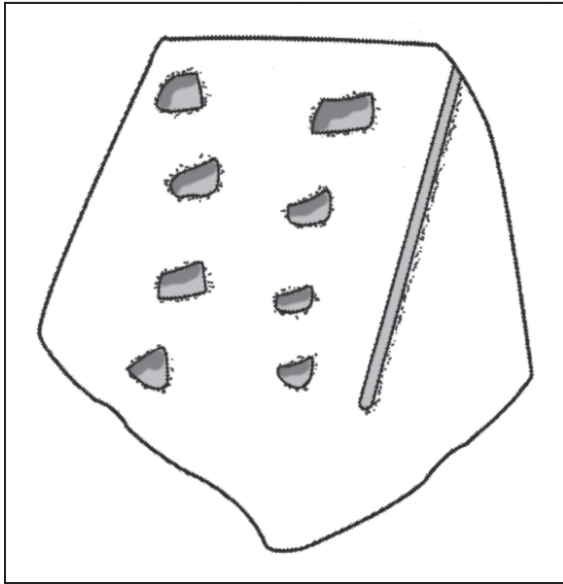


Figure 4. Decorative elements on an incised-punctated body sherd from 41SA44.

The lithic artifacts from 41SA44 consist of a brown chert ovoid biface, a Late Archaic straight-stemmed dart point of brown chert, and a yellowish-gray chert Perdiz arrow point.

41SA48

All three ceramic wares are represented in the sherds from 41SA48 (Table 2). The plain to decorated sherd ratio in the assemblage is 1.46. About 45 percent of the sherds are from vessels tempered only with grog, another 22 percent are from vessels that have both grog and bone temper inclusions, and 34 percent are from bone-tempered vessels; more than 55 percent of the sherds are from vessels that have had bone temper added to the paste. The highest proportion of sherds from bone-tempered vessels is in the utility wares (63 percent), while the highest proportion of sherds from vessels with grog temper is in the plain wares (75 percent) (Table 2).

Table 2. Ceramic wares at 41SA48.

Ware	Grog-tempered	Grog-Bone-tempered	Bone-tempered	N
Plain	66	36	34	136
Utility	25	9	34	68
Fine	11	5	9	25
Totals	102	50	77	229

About 73 percent of the decorated sherds are from utility wares (see Table 2). The most common of the utility wares are those with incised decorative elements ($n=28$, 30.1 percent of all the decorated sherds and 41.2 percent of the utility wares) (Table 3), including horizontal, horizontal diagonal, cross-hatched, diagonal opposed, and one body sherd with diagonal opposed, diagonal, and a zone of diagonal hatched elements (Figure 5b). Another incised rim sherd with horizontal and diagonal lines also is lip notched with linear tool punctates. There is a body sherd in the collection from 41SA48 that has diagonal opposed applied ridges between sets of vertical incised lines (Figure 5a).

Table 3. Decorative methods and elements in the utility and fine ware sherds from 41SA48.

Decorative method and elements	Rim	Body	N
Utility ware			
<i>Applied-Incised</i>			
diagonal opposed applied ridges and vertical incised lines	-	1	1
<i>Brushed</i>			
horizontal brushing marks	1	-	1
opposed brushing marks	-	4	4
parallel brushing marks	-	16	16
vertical brushing marks	1	-	1

Table 3. Decorative methods and elements in the utility and fine ware sherds from 41SA48, cont.

Decorative method and elements	Rim	Body	N
<u>Utility ware, cont.</u>			
<i>Incised</i>			
cross-hatched incised lines	-	1	1
diagonal opposed incised lines	-	2	2
diagonal opposed incised lines, diagonal lines, and diagonal hatched zone	-	1	1
horizontal incised lines	3	-	3
horizontal and diagonal incised lines	1	-	1
parallel incised lines	-	17	17
straight incised line	-	3	3
<i>Incised and Lip Notched</i>			
horizontal and diagonal incised lines and linear tool punctates on folded lip	1	-	1
<i>Incised-Punctated</i>			
diagonal opposed incised zones with tool punctates	-	1	1
incised zone with tool punctated rows	-	1	1
straight incised line and adjacent tool punctated row	-	1	1
<i>Punctated</i>			
circular punctated row	-	3	3
finger nail punctated rows	-	1	1
horizontal tool punctated row	-	1	1
horizontal and diagonal tool punctates	1	-	1
tool punctated rows	-	4	4
<i>Ridged</i>			
parallel ridged	-	1	1
<u>Fine ware</u>			
<i>Engraved</i>			
curvilinear engraved lines	-	1	1
curvilinear zone with cross-hatched engraved lines	-	2	2
curvilinear zone with hatched engraved lines	-	1	1
curvilinear and diagonal lines	-	1	1
curvilinear, horizontal, and diagonal engraved lines	1	-	1
diagonal engraved lines	1	-	1
diagonal engraved lines with open pendant triangles	-	1	1
diagonal opposed engraved lines	1	-	1
excised triangle el.	1	-	1
horizontal engraved lines	1	-	1
horizontal engraved line and engraved bracket	-	1	1
horizontal and diagonal engraved lines	-	3	3
horizontal engraved line and diagonal hatched zone, and linear tick marks on horizontal line	-	1	1

Table 3. Decorative methods and elements in the utility and fine ware sherds from 41SA48, cont.

Decorative method and elements	Rim	Body	N
<i>Engraved, cont.</i>			
horizontal and vertical engraved lines	1	-	1
parallel engraved lines	-	5	5
rectilinear engraved zone with cross-hatched engraved lines	-	1	1
triangular engraved zone with cross-hatched engraved lines	-	1	1
vertical engraved lines and opposed concentric circle el.	-	1	1
Totals	14	79	93

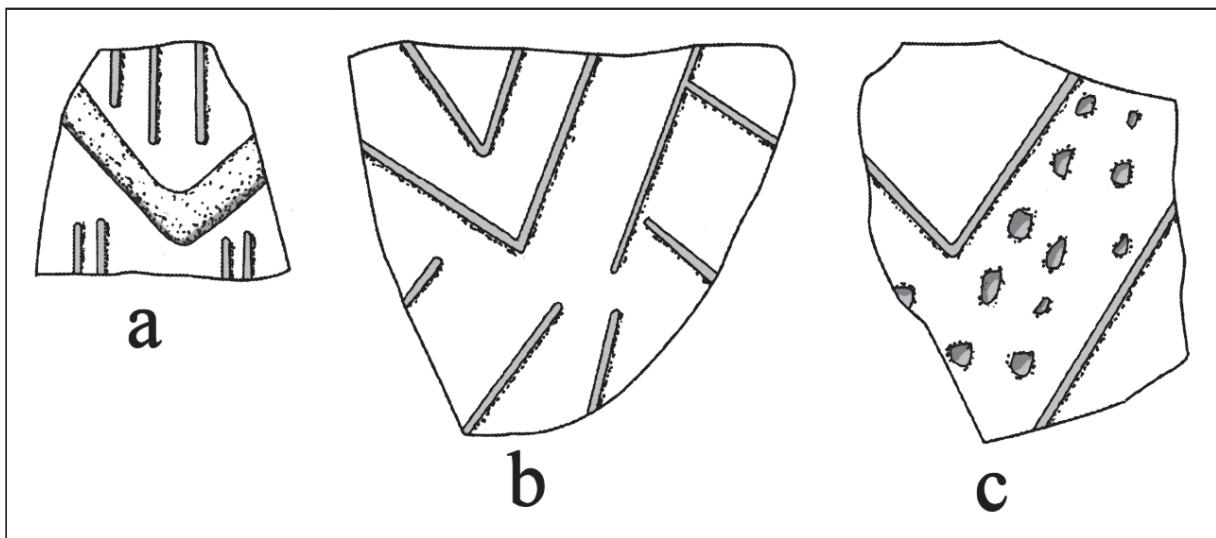


Figure 5. Selected decorative elements on utility ware sherds from 41SA48.

Brushed rim and body sherds comprise 23.7 percent of the decorated sherds from the site (see Table 3). Only three sherds (3.2 percent) have incised-punctated decorative elements (see Figure 5c), and another 10.8 percent have circular, fingernail, and tool punctated elements. There is also one non-locally manufactured post-A.D. 1500 Belcher Ridged, *var. Belcher* body sherd in the collection.

The fine ware sherds in the 41SA48 collection are all from engraved vessels (see Table 3). Among the more distinctive of the engraved sherds are several with curvilinear, rectilinear, or triangular zones filled with finely executed cross-hatched lines (Figure 6c-f) or hatched lines (Figure 6g). Rim sherds have curvilinear, horizontal, and diagonal engraved lines, diagonal engraved lines, diagonal opposed engraved lines, a large excised triangle element (Figure 6b), horizontal engraved lines, and horizontal and vertical engraved lines (Figure 6a).

One engraved sherd has an engraved bracket element (Figure 7a), while other in the 41SA48 collection has a set of vertical engraved lines next to concentric circle elements (Figure 7b). Engraved sherds from carinated bowls have diagonal engraved lines with open pendant triangle elements (Figure 7c) and a diagonal hatched zone along with a single horizontal engraved line with upward-pointing linear tick marks (Figure 7d).

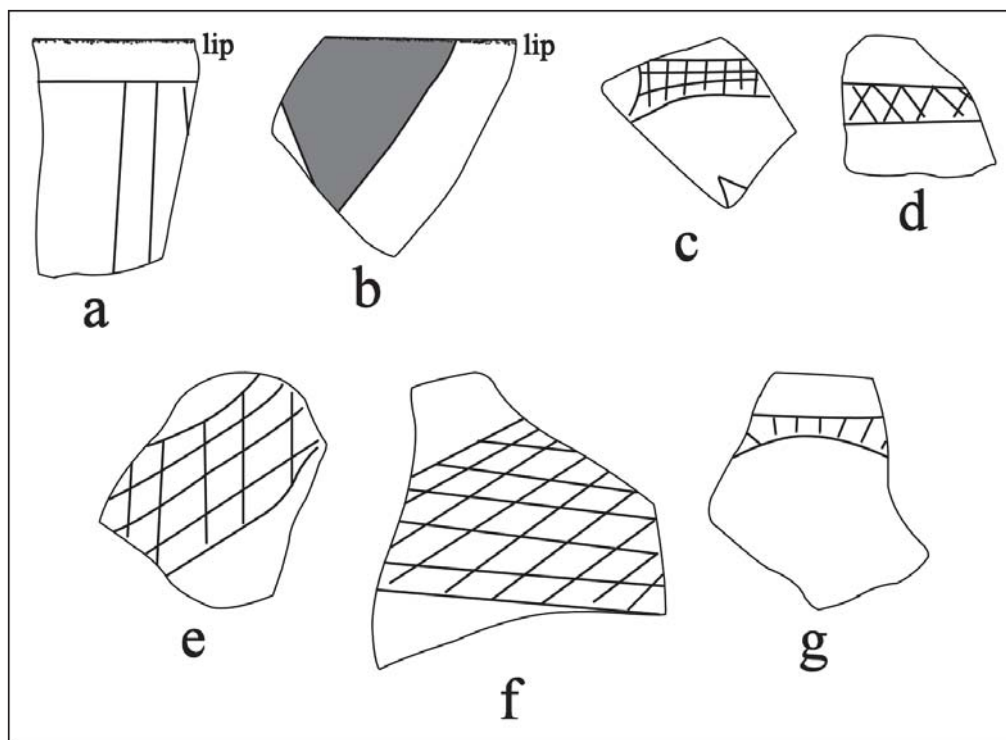


Figure 6. Selected decorative elements on engraved sherds from 41SA48.

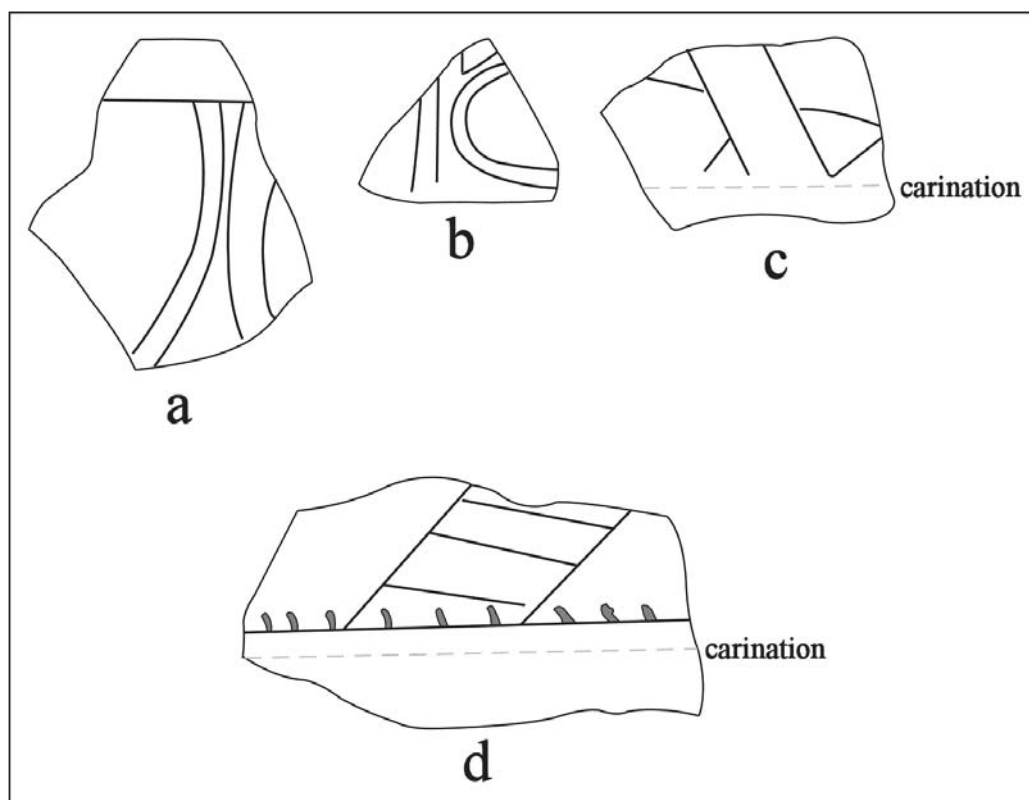


Figure 7. Other decorative elements on fine ware engraved sherds from 41SA48.

In addition to the ceramic sherds, a grog-bone-tempered elbow pipe rim sherd is in the 41SA48 collection. The pipe rim is 5.4 mm thick and the estimated orifice diameter is 24.5 mm. Elbow pipes are found primarily in post-A.D. 1400 Caddo components in East Texas. There is also a brown chert Gary point in the artifact assemblage.

41SA50

The ceramic vessel sherds from 41SA50 include both Woodland period and ancestral Caddo ceramic sherds. The Woodland period sherds are from Goose Creek Plain vessels (n=5). The Caddo wares (n=484) include sherds from plain, utility, and fine ware vessels (Table 4). The plain to decorated sherd ratio in the assemblage is 0.79.

Table 4. Ceramic wares at 41SA50.

Ware	Grog-tempered	Grog-Bone-tempered	Bone-tempered	N
Plain	120	9	83	212
Utility	105	21	126	252
Fine	5	3	9	17
Totals	230	33	218	481

The three ceramic wares are about evenly divided between sherds from grog-tempered vessels (48 percent) and bone-tempered vessels (47 percent) (see Table 4). In total, 52 percent of the sherds are from vessels that have had burned bone added to the paste as a temper inclusion. The highest proportion of sherds with bone temper are the fine wares (71 percent), while the plain wares have the highest proportion of sherds from grog-tempered vessels (61 percent).

There are also plain (n=2) and decorated shell-tempered sherds (n=1) in the 41SA50 assemblage, including one likely Emory Punctated-Incised body sherd with a row of tool punctations. These three sherds represent 0.6 percent of the Caddo ceramic assemblage.

The 270 decorated sherds are from utility ware (93.7 percent) and fine ware (6.3 percent) vessels (Table 5); all of the rim sherds in the assemblage are from utility wares. The largest proportion of the utility wares have brushing marks on the rim and/or body of jars, either as the sole decorative element (47.4 percent of the decorated sherds from the site) or in combination with appliqued, lip notched, incised, punctated, or punctated and lip notched (Figure 8a). In total, about 53 percent of the decorated sherds from 41SA50 have brushing marks.

Table 5. Decorative methods and elements in the utility and fine ware sherds from 41SA50.

Decorative method and elements	Rim	Body	N
Utility ware			
<i>Brushed</i>			
diagonal brushing marks	1	-	1
horizontal brushing marks	5	-	5
opposed brushing marks	-	4	4
overlapping brushing marks	-	2	2
parallel brushing marks	-	116	116

Table 5. Decorative methods and elements in the utility and fine ware sherds from 41SA50, cont.

Decorative method and elements	Rim	Body	N
<u>Utility ware, cont.</u>			
<i>Brushed-Appliqued</i>			
parallel brushing marks and parallel appliqued fillets	-	1	1
parallel brushing marks and straight appliqued fillet	-	1	1
<i>Brushed-Lip Notched</i>			
horizontal brushing marks and incised lip notching	1	-	1
<i>Brushed-Incised</i>			
horizontal incised lines and diagonal brushing marks	-	1	1
horizontal incised lines and vertical brushing marks	-	1	1
parallel brushed-incised marks and lines	-	3	3
parallel brushed and overlying parallel incised lines	-	2	2
<i>Brushed-Punctated</i>			
horizontal brushing marks and fingernail punctated row through the brushing	1	-	1
opposed brushing marks and tool punctated row	-	1	1
parallel brushing marks and tool punctated row through the brushing	-	1	1
parallel brushing marks and adjacent tool punctated row	-	1	1
<i>Brushed-Punctated-Lip Notched</i>			
horizontal brushing marks and tool punctated row through the brushing; lip notching on folded lip	1	-	1
<i>Grooved</i>			
parallel grooved	-	1	1
<i>Incised</i>			
cross-hatched incised lines	-	5	5
curvilinear incised lines	-	1	1
diagonal incised lines	-	1	1
horizontal incised lines	5	-	5
opposed incised lines	-	6	6
parallel incised lines	-	40	40
straight incised line	-	11	11
vertical incised lines	1	-	1
<i>Incised-Lip Notched</i>			
diagonal incised lines and tool punctates on lip	1	-	1
<i>Incised-Punctated</i>			
diagonal opposed incised lines above tool punctated rows	-	1	1
diagonal opposed incised lines between vertical rows of circular punctates	-	2	2
horizontal incised line above zone of circular punctates	1	-	1

Table 5. Decorative methods and elements in the utility and fine ware sherds from 41SA50, cont.

Decorative method and elements	Rim	Body	N
<u>Utility ware, cont.</u>			
<i>Incised-Punctated, cont.</i>			
horizontal incised lines and triangular incised zone filled with tool punctates	1	-	1
parallel incised zone with tool punctates	-	1	1
straight incised line and adjacent tool punctated row	-	2	2
tool punctated row under lip and above horizontal incised lines	1	-	1
triangular incised zone filled with linear tool punctates	-	1	1
<i>Pinched</i>			
parallel pinched ridges	-	2	2
<i>Punctated</i>			
circular punctated rows	-	4	4
finger nail punctated rows	-	12	12
tool punctated rows	1	8*	9
<i>Ridged</i>			
straight ridge	-	1	1
<u>Fine ware</u>			
<i>Engraved</i>			
curvilinear engraved lines	-	4	4
diagonal hatched engraved zones	-	1	1
horizontal and curvilinear engraved lines	-	2	2
opposed engraved lines	-	2	2
parallel engraved lines	-	3	3
parallel engraved lines and concentric curvilinear lines	-	1	1
rectilinear zone filled with cross-hatched engraved lines	-	1	1
straight engraved line	-	2	2
<i>Engraved-Brushed</i>			
diagonal engraved [on rim] and horizontal brushing marks on body	-	1	1
Totals	20	250	270

*includes one shell-tempered body sherd

Other common utility wares have incised decorative elements (see Table 5), with 25.9 percent of all the decorated sherds, as well as several different kinds of punctated elements (9.3 percent of the decorated sherds from 41SA50); one of the punctated sherds is from a likely shell-tempered Emory Punctated-Incised vessel. Two of the utility ware sherds (0.7 percent) are from Killough Pinched vessels. There are several distinctive sherds with incised-punctated decorative elements (see Figure 8b-d), including one rim with a triangular incised zone filled with rows of tool punctations. Three of the utility ware rim sherds (15 percent) have lip notches, in addition to either brushed, brushed-punctated, or incised decorative elements (see Table 5).

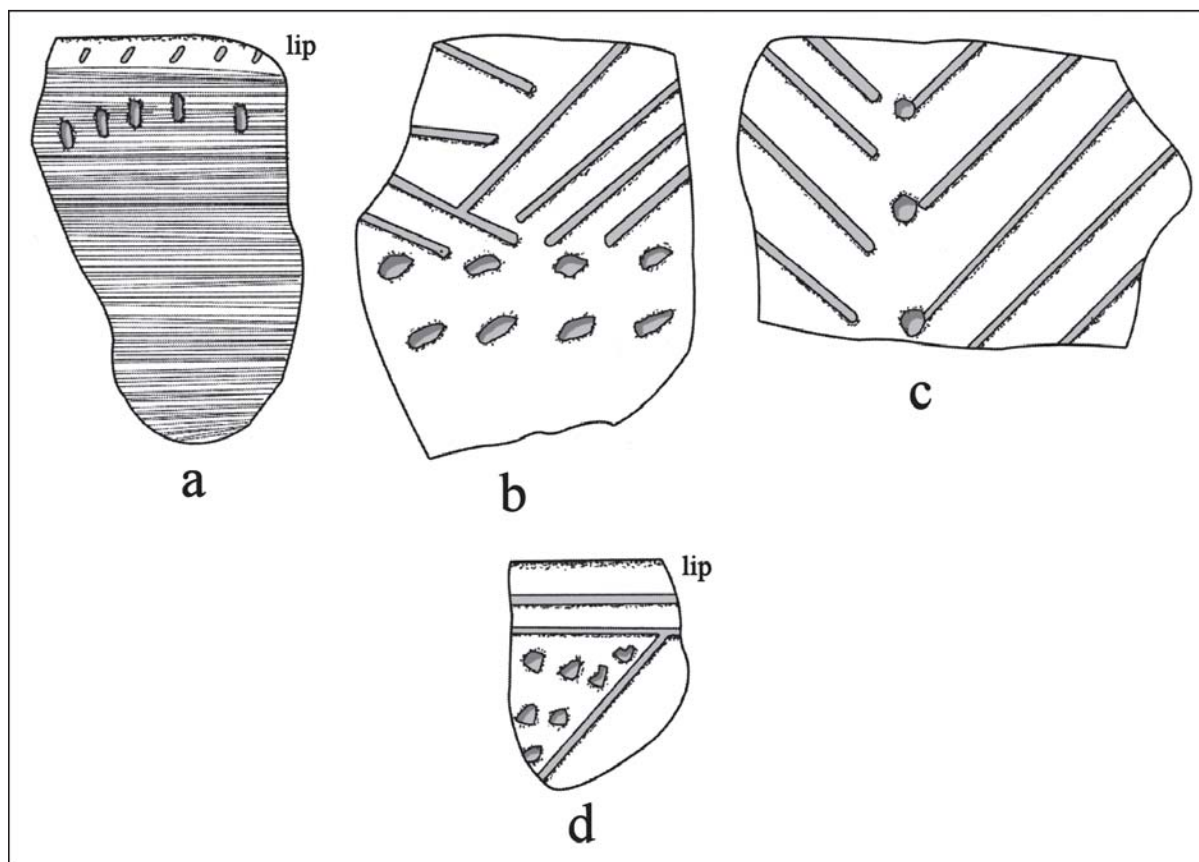


Figure 8. Selected decorative elements on utility ware sherds from 41SA50.

There are post-A.D. 1500 to late 17th century sherds in the 41SA50 assemblage, besides the shell-tempered Emory Punctated-Incised body sherd. They include a grog-tempered Belcher Ridged, *var. Belcher* body sherd, one Lindsey Grooved body sherd, and two Spradley Brushed-Incised sherds with parallel brushing marks overlain by parallel incised lines. The latter two ceramic types are generally found only in post-A.D. 1650 Caddo components in the Angelina and Neches river basins in East Texas (see Marceaux 2011).

The engraved fine ware sherds are from carinated bowls and bottles. They have curvilinear engraved lines, diagonal hatched engraved zones (Figure 9a), horizontal and curvilinear engraved lines, opposed engraved lines, parallel engraved lines, parallel engraved lines and concentric curvilinear lines (Figure 9b), and one sherd has a rectilinear zone filled with cross-hatched engraved lines. One fine ware sherd is from a carinated bowl with diagonal engraved lines on the rim panel and horizontal brushing marks on the vessel body (see Table 5).

There are five dart points in the 41SA50 collection, four of Woodland period age and one of likely Late Archaic age. The Woodland

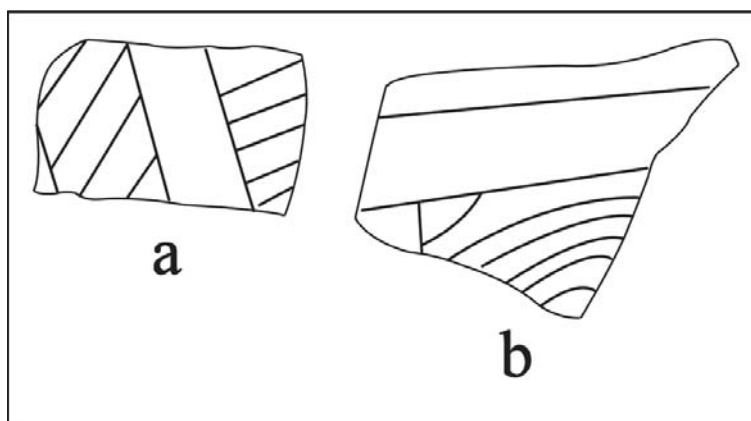


Figure 9. Selected decorative elements on fine ware sherds from 41SA50.

period dart points include two Gary, one Kent, and one Godley; they are made from local red chert (n=2) and petrified wood (n=2). the Late Archaic style dart point has an expanding stem and a flat base, and is made from a yellowish-gray chert.

41SA52

There are 222 plain ware, utility ware, and fine ware sherds in the WPA collections from 41SA52 (Table 6). The plain to decorated sherd ratio in this Caddo vessel sherd assemblage is 2.96. In a Woodland period component at 41SA52, there are 19 Goose Creek Plain body sherds and one Goose Creek Incised rim sherd with a diagonal incised line.

Table 6. Ceramic wares at 41SA52.

Ware	Grog-tempered	Grog-Bone-tempered	Bone-tempered	N
Plain	158	5	3	166
Utility	49	1	3	53
Fine	2	-	1	3
Totals	209	6	7	222

More than 97 percent of the sherds in the 41SA52 assemblage are from grog-tempered vessels (see Table 6). Only 5.9 percent of the sherds are either from grog-bone-tempered or bone-tempered vessels.

The 56 decorated sherds are dominated by sherds from utility ware vessels (94.6 percent), and only 5.4 percent of the sherds are from fine ware vessels. Almost 68 percent of the utility ware sherds, and 64 percent of all the decorated sherds, have incised decorative elements (Table 7), including one body sherd with a combination of horizontal, diagonal opposed, and horizontal hatched zone elements (Figure 10a). Brushed sherds comprise 10.7 percent of the decorated sherd assemblage, and the tool and fingernail punctated sherds account for 12.5 percent of the decorated sherds.

Table 7. Decorative methods and elements in the utility and fine ware sherds from 41SA52.

Decorative method and elements	Rim	Body	N
<u>Utility ware</u>			
<i>Brushed</i>			
parallel brushing marks	-	6	6
<i>Incised</i>			
diagonal incised lines	1	-	1
horizontal incised lines, closely-spaced	2	-	2
horizontal incised lines, widely-spaced	2	-	2
horizontal and diagonal incised lines	-	1	1
horizontal and diagonal opposed incised lines	-	3	3
horizontal, diagonal opposed, and horizontal hatched incised zone	-	1	1
parallel incised lines	-	19	19
straight incised line	-	6	6
vertical and diagonal opposed incised lines	-	1	1

Table 7. Decorative methods and elements in the utility and fine ware sherds from 41SA52, cont.

Decorative method and elements	Rim	Body	N
<u>Utility ware, cont.</u>			
<i>Incised-Punctated</i>			
curvilinear incised zones with tool punctates	-	1	1
horizontal and diagonal incised zones with tool punctates	-	1	1
parallel incised line between rows of crescent-shaped fingernail punctations	-	1	1
rectilinear incised zone filled with tool punctates	-	1	1
<i>Punctated</i>			
fingernail punctated rows	-	4	4
tool punctated rows	-	3	3
<u>Fine ware</u>			
<i>Engraved</i>			
curvilinear engraved lines	-	1	1
opposed engraved lines	-	1	1
parallel engraved lines	-	1	1
Totals	5	51	56

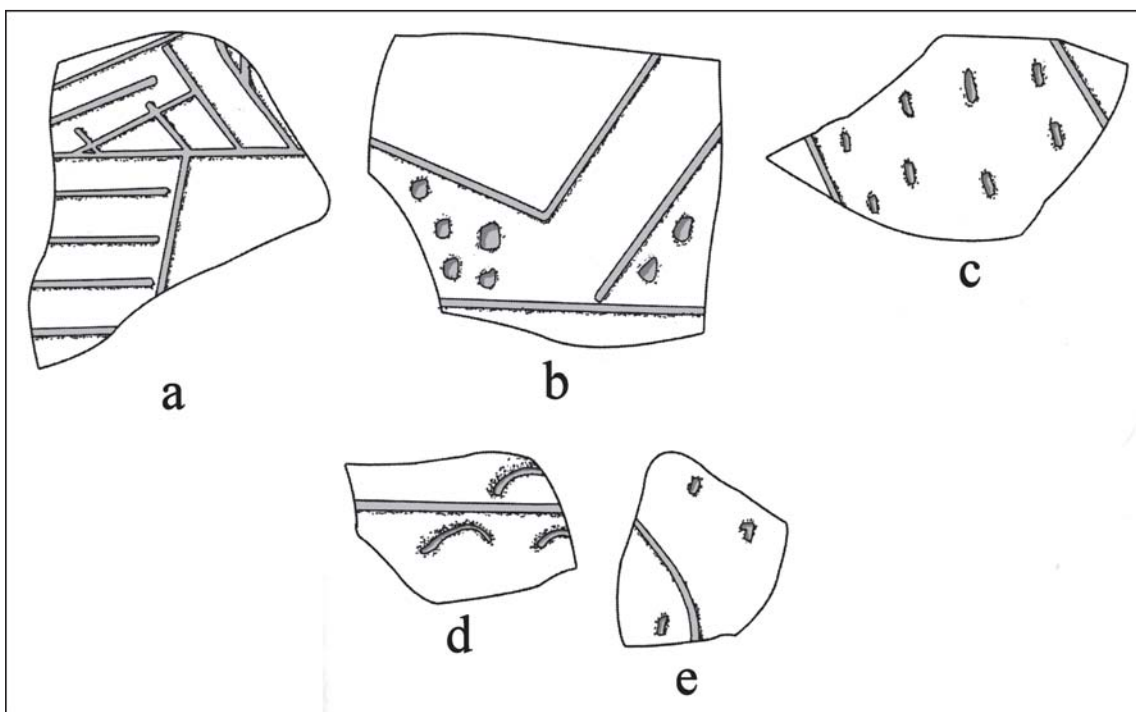


Figure 10. Selected decorative elements in utility ware sherds from 41SA52.

The incised-punctated sherds represent 7.1 percent of the decorated sherd assemblage (see Table 7). One body sherd is from a Weches Fingernail Impressed, *var. Weches* (Stokes and Woodring 1981:Figure 22n-q) vessel (see Figure 10d), and two other body sherds with rectilinear or diagonal incised zones filled with punctations (see Figure 10b-c) are likely from Pennington Punctated-Incised vessels. The other incised-punctated sherd has curvilinear incised zones with tool punctations, and is likely from a Crockett Curvilinear Incised vessel.

The three fine ware sherds in the 41SA52 assemblage are non-descript (see Table 7). They have either curvilinear or straight line elements.

The 41SA52 collection has both arrow points (n=2) and dart points (n=8). Both arrow points are of the Perdiz type, and they are made from local red and reddish-brown chert. The dart points include one Gary and two Kent points of Woodland period age and these are associated with the sandy paste Goose Creek Plain and Goose Creek Incised sherds at the site, and five expanding or straight-stemmed dart points of likely Late Archaic age. The Woodland period dart points are made from local cherts, while the Late Archaic points are made from a local yellow chert (n=4) and petrified wood (n=1).

Summary and Conclusions

The 1940 WPA archaeological survey of East Texas identified a number of ancestral Caddo sites around San Augustine in San Augustine County in the Ayish Bayou and Palo Gauchito Bayou basins; these streams drain into the Angelina River and Sabine River, respectively. This article has discussed the lithic and ceramic artifacts from eight of those sites. The diagnostic lithic artifacts (i.e., dart points and arrow points) indicate that the sites were occupied as early as the Middle Archaic period (at 41SA43) until sometime after ca. A.D. 1200, when Perdiz arrow points were in common use in the region. The ceramic artifacts are from two different main periods of use: (1) sometime during the Woodland period (ca. 500 B.C. to A.D. 800) by Mossy Grove culture peoples that made and used sandy paste Goose Creek Plain and Goose Creek Incised sherds (at 41SA43, 41SA44, 41SA50, and 41SA52), and (2) after ca. A.D. 1200 by ancestral Caddo peoples that made grog or bone-tempered ceramic vessels of several different forms and wares, and with sherds from decorated utility ware and fine ware vessels. Each of the eight sites has an ancestral Caddo component.

The suggestion that each of the sites was occupied sometime after ca. A.D. 1200 is based on the fact that the Ayish Bayou and Palo Gauchito Bayou sites have brushed utility ware sherds, and that sherds from brushed utility ware vessels, particularly jars, are a distinctive characteristic of both Middle (ca. A.D. 1200-1400), Late (ca. A.D. 1400-1680), and Historic (ca. post-A.D. 1680 to as late as the 1830s) Caddo sites in much of East Texas. It also appears to be the case that the relative proportions of brushed utility wares increase through time in those areas where brushed vessels were made and used, such that sherds with brushing marks may comprise as much as 50-90 percent of all the decorated sherds in some post-A.D. 1400 East Texas ceramic assemblages.

In East Texas, only a few ca. A.D. 1200-1400 sites have assemblages with high proportions (>60 percent of the decorated sherd assemblage) of brushed sherds; these occur in the mid-Sabine and Big Cypress Creek drainage basins. However, post-A.D. 1400 Late Caddo ceramic assemblages in East Texas with high proportions of brushed sherds occur in the upper and mid-Neches (Frankston phase sites), Angelina, middle Sabine and Big Cypress (Titus phase sites), and sites (of unknown cultural taxonomy) on tributaries of the Sabine River west of the Toledo Bend Reservoir area (in the Palo Gauchito bayou area, see Pertulla 2015a). Caddo ceramic assemblages without considerable amounts of brushed sherds occur only in the upper Sabine, Sulphur, and Red River basins. Historic Caddo sites with high proportions of brushed sherds in the ceramic assemblages are found principally in several parts of East Texas. The first is in Allen phase sites in the upper and mid-Neches River basin, A.D. 1700-1730 Nasoni Caddo sites in the western part of the Angelina River basin (Pertulla et al. 2009), and other Allen phase

sites/assemblages in the central part of the Angelina River basin. Significantly for this study, brushed ceramics are very rare at Mission Dolores de los Ais on Ayish Bayou (see Corbin et al. 1980, 1990; Marceaux 2011), less than 1 percent of the decorated sherds in the large ceramic vessel assemblage recovered there (see Marceaux 2011). Thus, it can be concluded that Hasinai Caddo groups in the Neches-Angelina River basin characteristically made and used many brushed ceramic vessels, while the utility wares in the Ayish ceramic tradition had incised, punctated, and incised-punctated decorative elements.

Ridged utility ware sherds from Belcher Ridged jars are common only in post-A.D. 1500 East Texas and western Louisiana Caddo communities in one locale along the Sabine River in the Toledo Bend Reservoir area, but they are present at 41SA48 and 41SA50. It is suspected that these sherds are from vessels made by Belcher phase Caddo potters. Other temporal indicators in these assemblages are the presence of Lindsey Grooved and Spradley Brushed-Incised sherds at 41SA50. Utility ware jar sherds with grooved decorative elements, or parallel brushing elements with overlapping straight incised lines that are opposed or perpendicular to the brushing, are distributed in two clusters of Caddo sites in the upper Neches and Angelina river basins that all date after ca. A.D. 1680 to ca. A.D. 1750 and are historic Caddo sites associated with the Allen phase.

On the basis of the proportions of brushed sherds in the assemblages, the presence of limited amounts of Belcher Ridged, Lindsey Grooved, and Spradley Brushed-Incised, and the absence of Historic Caddo fine ware types such as Patton Engraved, Natchitoches Engraved, or King Engraved, as a group these San Augustine County sites date almost exclusively before A.D. 1680. It is likely none of the sites were occupied in the main after ca. A.D. 1600, except perhaps 41SA50.

The earliest ancestral Caddo component is at 41SA52, which is characterized by low proportions of brushed utility wares, a low proportion of bone-tempered sherds, and ceramic types such as Crockett Curvilinear Incised, Pennington Punctated-Incised, and Weches Fingernail Impressed (Table 8). The ceramic assemblage was likely from a ca. A.D. 1200-1300 Caddo occupation, one where brushed pottery was only just becoming a feature of ancestral Caddo utility wares in the region. The aforementioned identified ceramic types were apparently made and used until ca. A.D. 1300 (see Story 2000). Slightly older ceramic assemblages with high proportions of incised, incised-punctated, and punctated decorative elements, and less than 5 percent brushed, have been documented at sites on Housen Bayou (41SB38) and Palo Gaucho Bayou (41SB28) (Perttula 2015a:Table 9).

Table 8. Ceramic comparisons between several San Augustine County ancestral Caddo sites on Palo Gaucho Bayou.

Type/attribute	41SA26	41SA48	41SA50	41SA52
Crockett Curvilinear Incised				+
Pennington P-I				+
Weches Fingernail Impressed				+
Lindsey Grooved			+	
Spradley Brushed-I			+	
Belcher Ridged		+	+	
Killough Pinched			+	
Emory Punctated-I			+	

Table 8. Ceramic comparisons between several San Augustine County ancestral Caddo sites on Palo Gaucho Bayou, cont.

Type/attribute	41SA26	41SA48	41SA50	41SA52
Shell temper			+	
Lip notching		+	+	
Elbow pipe		+		
% Bone temper	55.0	55.5	52.2	5.9
% Brushed	29.0	23.7	52.9	10.7
P/DR	1.42	1.46	0.79	2.96

+=presence

P/DR=plain to decorated sherd ratio

The younger and post-A.D. 1400 sites—all on Palo Gaucho Bayou—have moderate (23.7-29.0 percent) to high (52.9 percent) proportions of brushed utility wares, and a considerable use of bone as a temper (52.2-55.5 percent) (see Table 8). The suite of identified ceramic types at 41SA50, as well as the presence of a few shell-tempered vessel sherds, suggests that this is the latest of the sites, and clearly was occupied in the 16th and parts of the 17th centuries. Through time, the use of bone temper by Caddo potters in this part of the mid-Sabine River basin increased considerably, by an estimated “33-40 percent from sometime prior to A.D. 1200 to after ca. A.D. 1400 in the Palo Gaucho Bayou and 15 percent in the Housen Bayou sites” (Perttula 2015a:90). At Mission Dolores de los Ais, the proportion of bone temper in the ceramic assemblage there is 81 percent (Corbin et al. 1980, 1990), while it ranges between 30.5-45.0 percent on Late Caddo and Historic Caddo sites on Attoyac Bayou and Late Caddo sites on Palo Gaucho Bayou on Sabine County (Table 9).

Table 9. Regional ceramic comparisons.

Attributes	41SA25*	Sites Attoyac Bayou**	Palo Gaucho Bayou***
bone temper	81.0%	45.0%	30.5%
shell temper	8.2%	0.2%	-
P/DR	1.52	1.12	N/A
Natchitoches E	6.2%	-	-
Patton Engraved	6.7%	Present	-
Other Engraved	43.4%	21.2%	5.6%
Emory P-I	6.4%	0.3%	-
Other I-P	0.4%	5.5%	8.2%
Incised	32.2%	19.7%	43.8%
Punctated	3.9%	10.3%	2.7%
Brushed	0.0%+	41.8%	34.7%
Ridged	-	0.1%	0.4%

*Corbin et al. 1980, 1990

**41NA67, 41SA94, and 41SA116, Marceaux 2011, and 41SA7 and 41SA13, Perttula 2015b

***41SB29 and 41SB34, Perttula 2015a

+Marceaux (2011) identified 0.7% brushed in his reanalysis of 1940 decorated sherds from the site; the P/DR in this reanalyzed assemblage was 1.91

Other comparisons between Late and Historic Caddo sites on Attoyac Bayou and Palo Gauchito Bayou (not including the Palo Gauchito sites discussed elsewhere in this article, but see Table 8) indicate just how distinctive the Mission Dolores de los Ais (41SA25) ceramic assemblage is from sites in adjacent drainage basins, but also indicate that there are differences in broadly contemporaneous Caddo sites in the two bayous. Where the Mission Dolores de los Ais ceramic assemblage differs the most from surrounding ancestral Caddo sites includes: (1) the very high proportions of bone temper and shell temper use; (2) the virtual absence of brushed utility wares; (3) the presence of Emory Punctated-Incised and Natchitoches Engraved vessel sherds; and (4) the overall high proportions of engraved fine wares—56.3 percent—at the site compared to 21.2 percent of the decorated sherds on the Attoyac Bayou sites, and only 5.6 percent of the decorated sherds on Palo Gauchito Bayou sites south and southeast of San Augustine (see Table 9). In the Palo Gauchito Bayou sites (41SA26, 41SA48, 41SA50, 41SA52) discussed in this article, fine ware engraved sherds comprise only 11.5 percent of the decorated sherd assemblages.

In the end, what these comparisons suggest is that the Mission Dolores de los Ais ceramic assemblage stands apart in several distinctive ways from Late to Historic Caddo ceramic assemblages associated with Hasinai Caddo groups living in adjoining drainage basins in this part of East Texas. If the Mission Dolores de los Ais ceramics are a representative sample of the character of an 18th century Ayish ceramic assemblage, then it seems apparent that sites in the Attoyac, Housen, and Palo Gauchito Bayou basins in Nacogdoches, San Augustine, and Sabine counties are not part of an Ayish ceramic tradition, unless there were dramatic changes in tempering and decorative elements between the 16th and 17th centuries and the early to mid-18th century that may have been made by ancestral Ayish potters. At this point, no other such Ayish ceramic assemblages have been identified in the region. If there were not such dramatic changes in ceramic stylistic and technological characteristics in an Ayish ceramic tradition (whose ancestral sites have yet to be discovered), then that also suggests that the Ayish may not have been living in this part of East Texas long before the Spanish began to make a concerted effort to explore the region after 1689 (Foster 1995).

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