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The M. S. Roberts Site (41HE8): Archaeological Investigations at a Caddo Mound Site in the Upper Neches River Basin in East Texas

Timothy K. Perttula, Mark Walters, and Bo Nelson

Introduction and Previous Archaeological Work

The first archaeological investigations at the M. S. Roberts site in the Caddo Creek valley of the upper Neches River basin in East Texas (Figure 1) was by University of Texas (UT) archaeologists in 1931 (Perttula 2016). In that work, UT archaeologists excavated a trench of unknown size in the ancestral Caddo mound at the site, and gathered a surface collection from the plowed cotton field around the mound.

Figure 1. General location of the M. S. Roberts (41HE8) and Walter Brigham (41HE410) sites in East Texas.

No further archaeological work was done at the site until January 2015 when a surface collection was obtained at the site with the permission of the landowners, Jim and Denise Renfroe (Perttula and Walters 2016). Later that year, a number of shovel tests and auger tests were excavated in and around the earthen mound, and an aerial survey of the site was done by Arlo McKee (University of Texas at Dallas) to map the topography of the landform, the earthen mound, and its associated borrow pit, as well as reconstruct changes in the shape and size of the mound between 1931 and 2015 (Perttula et al. 2016). The shovel and auger tests identified burned zones in the mound that were thought to represent the remains of burned Caddo buildings that stood on the mound, and also identified non-mound habitation deposits at the site.

In January 2016, again with the permission and support of the landowners, we returned to the M. S. Roberts site to conduct additional investigations, including remote sensing (see McKinnon et al., this volume) of a 2.8 acre area over and around the mound, more shovel tests and the excavation of three 1 x 1 m units (Units 1-3), and a surface reconnaissance of landforms to the east of the site to ascertain if the site boundaries continued to the east (see Appendix 1, this article). The main purpose of the latter archaeological work was three-fold: (1), to better define the spatial extent of non-mound archaeological deposits; (2), to locate and sample well-preserved non-mound habitation deposits and obtain charred plant remains for AMS dating; and (3) investigate the stratigraphic character of the mound deposits, identify cultural features in the mound, and hopefully obtain charred plant remains or unburned animal bones from these deposits for AMS dating.

Excavations in the Mound

Two 1 x 1 m units (Unit 1 and 3) were excavated in the mound at the M. S. Roberts site, one unit in each of the two mound lobes detected in the remote sensing (Figure 2). The southwestern corner of Unit 1 is at N88 E 45 in the remote sensing grid, while Unit 3's remote sensing grid coordinate is N70 E45 (Figure 3a-b).

Unit 1 excavations encountered a number of sediment zones in the mound below Zone 1, a dark yellowish-brown sandy loam plow zone (Figures 4a-b and 5a-b), and to a depth of ca. 105 cm bs at the bottom of the unit; the base of the mound was not exposed in either Unit 1 or 3 excavations. These include a brownish-gray sandy loam (Zone 2), with chunks of charcoal; a gray, grayish-brown, and brown sandy loam with gray clay inclusions (Zone 3); a yellowish-brown sandy loam (Zone 4); and a dark yellowish-brown sandy loam (Zone 5). A dark grayish-brown sandy loam with gray clay as well as charcoal flecks and chunks was visible at 101 cm bs in the floor of the unit. In the north wall profile (Figure 5b), Zone 2 has three subdivisions: 2a, an orange and yellow mottled brown sandy loam; 2b, a dark yellowish-brown sandy loam with significant amounts of charred plant remains and wood charcoal chunks; and 2c, a yellowish-brown sandy loam with occasional charred remains; this zone is laminated or water-lain in the east wall profile. The top of Zone 2c is level with Zone 3 in the west wall profile. Zone 3 also has subdivisions: 3a (visible in the south wall profile), orange and yellow mottles along with dark grayish-brown and dark yellowish-brown sandy loam mound fill; and 3b (visible in the east wall), orange and yellow sandy loam with mottled clumps.

Our interpretation of the Unit 1 profile is that Zone 1 represents a plow zone, and Zones 2-6 are mound zones. Zone 2b represents the remains of a burned Caddo building; a large piece of a burned mud dauber nest was recovered in situ in this zone at 31 cm bs. Zone 3-5 are mound fill zones over another burned and more deeply buried Caddo building in Zone 6.

Unit 3 excavations did not encounter any clear evidence for burned Caddo buildings in the 100 cm high profile (Figure 6a-b). Rather, below the Zone 1 dark yellowish-brown sandy loam plow zone are Zones 2-4, each being mound fill deposits. Zone 2 is a yellowish-brown to dark yellowish-brown sandy loam with gray clay and orange/yellow mottles; Zone 3 is a yellowish-brown sandy loam with orange mottles; and Zone 4 is a mix of grayish-brown clay and yellowish-brown sandy loam.

Figure 2. Location of the earthen mound at the M. S. Roberts site, significant habitation areas, Units 1-3, and additional shovel tests.

Figure 3. Unit excavations: a, looking south at Units 1 (foreground) and 3 (background) on the earthen mound at the M. S. Roberts site; b, looking south at Kevin Stingley beginning excavations in Unit 3. Photographs provided by Mark Walters.

Figure 4. Unit 1, west wall profile: a, profile drawing; b, looking west (photograph provided by Mark Walters).

Figure 5. Unit 1, north wall profile: a, profile drawing; b, looking north (photograph provided by Mark Walters).

Figure 6. Unit 3, north wall profile: a, profile drawing; b, looking north (photograph provided by Mark Walters).

Because of the difficulty in screening the archaeological deposits in the mound, due to the clay content of the mound fill zones, only the upper 35 cm of the deposits in Unit 1 were screened through ¼-inch mesh and only the upper 10 cm were screened in Unit 3. These excavations recovered numerous ceramic vessel sherds in these deposits (approximately 71 percent of the total number of artifacts in the two units), animal bones and wood charcoal from various depths in Zones 2-4, and a large section of a mud dauber nest in Zone 2b (Table 1).

Table 1. Distribution of artifacts from Units 1 and 3 on the mound at the M. S. Roberts site.

Depth (cm bs)	PS	DS	AB	WC	LD	MD	Other	N
0-10	25	6	-	-	1	-	1 Mano	33
10-20	18	6	1	-	2	-	1 Mano	28
20-30	28	10	1	4	-	-	1 FCR	44
30-35	9	4	-	5	-	1	-	19
37	-	-	4	-	-	-	-	4
54	-	-	7	-	-	-	-	7
77	-	-	3	-	-	-	-	3
80	-	-	-	11	-	-	-	11
Back dirt	2	-	-	-	-	-	-	2
Totals	82	26	16	20	3	1	3	151

PS=plain sherd; DS=decorated sherd; AB=animal bone; WC=wood charcoal; LD=lithic debris; MD=mud dauber nest fragment; FCR=fire-cracked rocks

Excavations and Shovel Tests in off-Mound Areas

Additional shovel tests both north, south, and east of the mound at the M. S. Roberts site has identified habitation deposits from an ancestral Caddo occupation over a ca. 18,000 square meter area (ca. 4.5 acres) of the landform. The best preserved habitation deposits that we have identified to date are in a ca. 35 x 35 m area south and southeast of the southern end of the mound. Unit 2 (N36 E56 on the remote sensing grid) was excavated in this area (see Figure 2), adjacent to ST 35. Remote sensing work in this part of the site also suggested that there were likely cultural pit features in this area (see McKinnon et. al., this volume).

Unit 2 was excavated to 50 cm bs (Figure 7). Sediments in the unit included a ca. 15 cm thick yellowish-brown sandy loam plow zone (Zone 1), a ca. 6-7 cm thick mottled dark yellowish-brown sandy loam (Zone 2), and a dark yellowish-brown sandy loam zone (Zone 3) that extended to at least 50 cm bs. Zone 2 likely represents an unplowed portion of a shallowly buried Caddo occupation horizon. There were animal bone and charcoal flecks noted in the upper portion of Zone 3.

One possible cultural feature, likely a post hole, was identified in Zone 3, but apparently originated in Zone 2 (ca. 20-47 cm bs). This dark brown sandy loam stain was noted in the west wall profile, and is ca. 28 cm in diameter, with straight walls and a rounded base (see Figure 7). Ceramic vessel sherds were most abundant between 10-20 cm bs, ceramic pipe sherds occurred only between 20-30 cm bs, and wood charcoal and nutshell were recovered in habitation deposits between 20-50 cm bs (Table 2); 71 percent of the recovered artifacts are ceramic vessel sherds.

Figure 7. West wall profile of Unit 2 at the M. S. Roberts site.

Table 2. Distribution of artifacts from Unit 2 at the M. S. Roberts site.

Depth (cm bs)	PS	DS	CPS	AB	WC	NS	LD	Other	N
0-10	13	6	-	-	-	-	2	-	21
10-20	23	11	-	-	-	-	6	-	40
20-30	12	2	3	-	4	3	3	-	27
30-40	17	4	-	-	1	3	3	-	28
40-50	15	2	-	-	10	2	2	1 Mano	32
Totals	80	25	3	-	15	8	16	1	148

PS=plain sherd; DS=decorated sherd; CPS=ceramic pipe sherd; AB=animal bone; WC=wood charcoal; NS=nutshell; LD=lithic debris

Fourteen of the shovel tests excavated at the M. S. Roberts site in January 2016 contained ancestral Caddo archaeological deposits and material culture remains (Table 3; see also Figure 2). The deposits are in relatively thick (75+ cm) yellowish-brown A- and E-horizon sediments. In ST 34, a dark brown sandy loam zone was recognized between 26-54 cm, and this zone may be the unplowed portions of a buried ancestral Caddo occupation horizon; a fragment of a mud dauber nest was recovered between 40-60 cm bs in ST 34. A clay B-horizon was encountered in only one of these shovel tests (ST 30) in the northwestern part of the landform (see Figure 2), at 75 cm bs.

Table 3. Descriptions of positive shovel tests at the M. S. Roberts site.

ST Number	Description	Artifacts
25	0-100 cm+, yellowish-brown sandy loam	ceramic sherds, 20-40 cm bs
26	0-100 cm+, yellowish-brown sandy loam	lithic debris, 0-20 cm bs
27	0-100 cm+, yellowish-brown sandy loam	ceramic sherds, 20-40 cm bs; lithic debris, 40-60 cm bs
28	0-100 cm+, yellowish-brown sandy loam	ceramic sherds, 0-40 cm bs
30	0-75 cm, yellowish-brown sandy loam; 75-79 cm+, strong brown clay	ceramic sherds, 0-20 cm bs
31	0-44 cm, yellowish-brown sandy loam; 44-50 cm+, grayish-brown sandy loam	ceramic sherds, 0-20 cm bs
33	0-50 cm+, yellowish-brown sandy loam	ceramic sherds, 0-40 cm bs
34	0-26 cm, yellowish-brown sandy loam; 26-54 cm, dark brown sandy loam; 54-60 cm+, yellowish-brown sandy loam	ceramic sherds, 0-60 cm bs; animal bone, 20-60 cm; mud dauber nest, 40-60 cm bs; lithic debris, 0-40 cm bs; ceramic sherds, 0-60 cm bs
35	0-78 cm+, yellowish-brown sandy loam	ceramic sherds, 20-78 cm bs; lithic debris, 20-40 cm bs; nutshell, 40-60 cm bs; animal bone, 40-60 cm bs
36	0-60 cm+, yellowish-brown sandy loam	ceramic sherds, 0-40 cm bs; lithic debris, 0-20 cm bs
41	0-101 cm+, yellowish-brown sandy loam	ceramic sherds, 40-60 cm bs
42	0-100 cm+, yellowish-brown sandy loam	ceramic sherds and lithic debris, 0-20 cm bs
43	0-100 cm+, yellowish-brown sandy loam	ceramic sherds, 40-60 cm bs
44	0-100 cm+, yellowish-brown sandy loam	lithic debris, 20-40 cm bs

Only low densities of artifacts have been recovered in shovel tests north and east of the earthen mound (Table 4; see also Figure 2), as well as in shovel tests ca. 60-120 m south of the mound. However, ST 34, ST 35, and ST 36 had artifact densities that range from 12-25 per shovel test, or ca. 96-200 artifacts per square meter of archaeological deposits.

Table 4. Distribution of artifacts in surface collections and in the positive shovel tests at the M. S. Roberts site.

ST No.	PS	DS	LD	AB	NS	BC	MD	N
25	-	1	-	-	-	-	-	1
26	-	-	1	-	-	-	-	1
27	1	-	1	-	-	-	-	2
28	5	-	-	-	-	-	-	5
30	1	-	-	-	-	-	-	1
31	2	-	-	-	-	-	-	2
33	3	-	-	-	-	-	-	3
34	4	3	1	3	-	-	1	12
35	14	4	4	1	2	-	-	25
36	6	4	4	-	-	-	-	14
41	-	1	-	-	-	-	-	1
42	1	-	1	-	-	-	-	2
43	1	-	-	-	-	-	-	1
44	-	-	1	-	-	-	-	1
Subtotal	38	13	13	4	2	-	1	71
Surface	75	49	4	3	-	2	-	133
Totals	113	62	17	7	2	2	1	204

PS=plain sherd; DS=decorated sherd; LD=lithic debris; AB=animal bone; NS=nutshell; BC=burned clay; MD=mud dauber nest fragment

The mean density of artifacts in the shovel testing is 5.1 per positive shovel test, or ca. 40.8 artifacts per square meter of archaeological deposits. The highest densities of artifacts—and the only shovel tests that contain animal bone and charred nutshells (Table 4)—occur in ST 34-ST 36 in a significant Caddo habitation deposit not far to the southeast of the earthen mound (see Figure 2).

Material Culture Assemblage

The most common material culture remains recovered in the January 2016 archaeological investigations from the M. S. Roberts are ceramic vessel sherds from plain, utility, and fine wares (Table 5). Utility wares and fine wares comprise only 29 percent of the sherds, with the remainder of the sherds identified as plain ware rim, body, and base fragments. More than 93 percent of the sherds are from grog-tempered vessels; bone-tempered sherds account for only 6.2 percent of this assemblage, including 7.9 percent of the utility wares and 6.2 percent of the plain wares. None of the fine ware sherds are from bone-tempered vessels. Another 121 ceramic vessel sherds and seven chipped stone artifacts were recovered in a February 2016 surface collection (see Appendix 2, this article)

Table 5. Ceramic Wares from the January 2016 investigations at the M. S. Roberts site.

Ware	Grog-tempered	Bone-tempered	N
Plain	258	17	275
Utility	82	7	89
Fine	24	-	24
Totals	364	24	388

In the January 2016 decorated sherd assemblage, 78.8 percent of the sherds are from utility wares and the remaining 21.2 percent are from fine wares (Table 6). The most common of the utility wares are sherds with incised elements (49 percent of the utility wares), including sherds with cross-hatched, diagonal, and opposed incised elements. Although the typological identifications are uncertain, such decorative elements are present in jars and carinated bowls of the Canton Incised and Maydelle Incised types (see Suhm and Jelks 1962). One rim sherd has a distinctive horizontal and diagonal opposed incised element (Figure 8c).

Table 6. Decorative methods and elements in the January 2016 ceramic sherd sample from the M. S. Roberts site.

Decorative Method and Element	Rim	Body	N
<u>Utility Ware</u>			
<i>Appliqued</i>			
straight applied fillet	-	1	1
straight applied ridge	-	1	1
<i>Brushed</i>			
opposed brushed	-	1	1
parallel brushed	-	10	10
<i>Brushed-Incised</i>			
parallel brushed and overlying diagonal incised lines	-	1	1
<i>Brushed-Incised-Punctated</i>			
vertical punctated row, vertical brushing, and diagonal incised lines overlying brushing marks	-	1	1
<i>Brushed-Punctated</i>			
parallel brushed with tool punctated row through the brushing	-	1	1
<i>Incised</i>			
cross-hatched incised lines	-	9	9
curvilinear incised line	-	1	1
diagonal incised lines	2	1	3
horizontal and diagonal incised lines	1	-	1
horizontal and opposed diagonal incised lines	1	-	1

Table 6. Decorative methods and elements in the January 2016 ceramic sherd sample from the M. S. Roberts site, cont.

Decorative Method and Element	Rim	Body	N
<u>Utility Ware</u>			
horizontal and vertical incised lines	1	-	1
opposed incised lines	-	2	2
parallel incised lines	-	10	10
straight incised line	-	15	15
vertical incised lines	1	-	1
<i>Incised-Punctated</i>			
parallel incised lines and overlying fingernail punctated rows	-	1	1
straight incised line and adjacent tool punctated row	-	2	2
triangle incised zone filled with tool punctates	1	-	1
<i>Punctated</i>			
circular punctated rows	-	1	1
fingernail punctated rows	-	12	12
single fingernail punctate	-	1	1
tool punctated rows	1	7	8
linear tool punctated rows	1	2	3
<u>Fine Ware</u>			
<i>Engraved</i>			
bracket el.	-	1	1
curvilinear engraved line	-	2	2
diagonal engraved lines	-	1	1
horizontal engraved lines	1	-	1
horizontal and diagonal engraved lines	-	1	1
opposed engraved lines	-	1	1
parallel engraved lines	-	4	4
rectilinear engraved element	1	-	1
straight engraved line	-	4	4
<i>Red-Slipped</i>			
int./ext. red-slipped	-	3	3
ext. red-slipped	-	5	5
Totals	11	102	113

Punctated sherds comprise 28 percent of the utility wares in this sample from the M. S. Roberts site, and these sherds have either fingernail, tool, or linear tool punctated elements. One rim sherd from a rim peaked jar with broad strap handles (from ST 35) has horizontal rows of tool punctations on the rim itself, as well as vertical tool punctated rows along the edges of the handle (Figure 9).

Figure 8. Selected decorative elements in utility ware and fine ware sherds from the M. S. Roberts site: a, brushed-incised-punctated body sherd (Surface); b, incised-punctated rim sherd (Unit 1, 10-20 cm bs); c, incised rim sherd (Unit 1, 20-30 cm bs); d, engraved body sherd (Unit 1, 20-30 cm bs).

Sherds with brushed decorative elements, either as the sole form of decoration, or in combination with brushed-incised, brushed-punctated, and brushed-incised-punctated (see Figure 8a) elements, comprise 15.7 percent of the utility ware sherds (see Table 8). The brushed, brushed-incised, and brushed-punctated sherds are probably from Bullard Brushed jars.

Other utility wares have applied (2.2 percent of the utility wares) and incised-punctated (4.5 percent) decorative elements (see Table 6). The one incised-punctated rim sherd, from either a Canton Incised or Maydelle Incised vessel, has an incised triangle zone on the rim that is filled with tool punctations (see Figure 8b).

The engraved fine ware sherds from the site are primarily simple geometric elements (see Table 6) on carinated bowls and bowls. Two have a single curvilinear engraved line, and may be from bottles, and one rim has rectilinear engraved elements. One body sherd has an engraved bracket element (see Figure

Figure 9. Punctated rim and punctated handle ceramic sherd, ST 35, 20-40 cm bs.

8d). About 6.3 percent of the engraved sherds (from ST 36, 0-20 cm bs) have a red ochre-rich pigment rubbed in the engraved lines, but none of the engraved sherds have a red slip. However, 33 percent of the fine ware sherds have a red slip on one or both vessel surfaces (see Table 6), and at least one of these sherds is from a bottle (Unit 2, 40-50 cm bs). These sherds are likely from Sanders Slipped vessels (see Perttula, Walters, and Nelson 2016:87).

Three ceramic pipe sherds from grog-tempered long-stemmed Red River style pipes (see Hoffman 1967) were recovered between 20-30 cm bs in Unit 2. The two partial pipe stems range from 2.3-3.8 mm in wall thickness, and the one rim sherd has a rounded lip and 3.4 mm thick walls. These sherds are likely from a Haley variety of Red River pipe (Hoffman 1967:10 and Figure 5).

The combined ceramic vessel sherd assemblage from the M. S. Roberts site (see Perttula 2016; Perttula and Walters 2016; Perttula et al. 2016) is provided in Table 7. As can be seen, 91.5 percent of the sherds are from vessels tempered with grog (either as the sole temper or in association with burned bone), and 11.3 percent of the sherds are from vessels tempered with burned bone. Sherds from utility ware vessels comprise 79.1 percent of the decorated sherds, and most of these are from vessels with

incised, punctated (mainly fingernail or tool elements), or brushed decorative elements. Fine ware sherds in the M. S. Roberts assemblage are either from engraved or red-slipped vessels (see Table 7). The proportion of red-slipped sherds in the decorated sherd assemblage (5.2 percent, and 25 percent of the fine ware sherds) is notable, particularly given the relatively common manufacture of red-slipped vessels in parts of East Texas during the Middle Caddo period (see Perttula 2013).

Table 7. Summary of the ceramic sherd assemblage from the M. S. Roberts site.

Temper/ Decorative Method	N	%
Grog temper	813	88.7
Grog-bone temper	26	2.8
Bone temper	78	8.5
Subtotal, sherds analyzed for temper	917	100.0
<i>Utility Ware</i>		
Appliqued	7	1.8
Brushed	55	14.4
Brushed-Incised	13	3.4
Brushed-Incised-Punctated	1	0.3
Brushed-Punctated	2	0.5
Incised	124	32.3
Incised-Punctated	17	4.5
Punctated	84	21.9
Subtotal, Utility Ware	303	79.1
<i>Fine Ware</i>		
Engraved	60	15.7
Slipped	20	5.2
Subtotal, Fine Ware	80	20.9
Totals, Decorated sherds	383	100.0

Source: Perttula 2016; Perttula and Walters 2016; Perttula et al. 2016; this article

Analyses of the character of ancestral Caddo ceramic sherd assemblages from 41 different components and/or sites in the upper Neches River basin in East Texas have identified several temporal changes in (1) the proportion of brushed sherds in decorated sherd assemblages; (2) the percentage of other wet paste decorations (i.e., incised, incised-punctated, punctated, etc.) on sherds; (3) changes in the ratio of plain to decorated sherds (P/DR); (4) the use of burned bone as a ceramic vessel temper; and (5) the ratio of brushed sherds to other wet paste decorated sherds (Table 8). These analyses have led to the recognition of six temporal sequent groups of assemblages, dating from as early as ca. A.D. 1000-1200 in the Early Caddo period (Group VI) to Historic Caddo ceramic assemblages (Group I) that date after ca. A.D. 1680.

Table 8. Comparative sherd assemblage data from Lake Palestine Caddo sites, nearby Caddo sites, and the M. S. Roberts site in the upper Neches River basin.

Site	No. of Dec. Sherds	%Brushed	%bone-temper	%Wet-paste decorations	P/DR	Brushed/Wet paste ratio
YOUNGEST SITES: GROUP I, Allen phase, ca. post-A.D. 1680						
41CE421*	1805	88.1	5.4	7.8	0.28	8.5
41CE429*	465	87.7	0.8	9.7	0.22	9.07
Pine Snake*	305	85.2	5.7	8.8	0.51	9.63
41CE354*	474	82.7	3.1	8.9	0.20	8.14
GROUP II, latest Frankston phase, ca. A.D. 1560-1680						
41HE22	228	85.5	?	7.5	0.62	11.5
41AN1	295	83.1	5.1	7.1	0.19	7.21
41CE324	188	81.9	3.2	7.3	0.48	11.0
Attaway	814	84.4	?	10.6	1.71	8.0
Debro	311	80.0	?	10.3	0.14	7.75
41SM91	191	75.9	0.7	14.7	0.51	5.18
41AN21*	133	75.9	1.1	17.1	0.30	5.32
William Sherman	525	75.8	?	16.2	0.44	4.68
A. C. Saunders	5805	74.5	15.5	14.4	0.21	5.30
41AN8*	98	70.4	3.3	18.3	0.55	3.83
41AN2*	152	67.8	11.5	17.8	0.41	3.81
GROUP III, Frankston phase, ca. A.D. 1480-1560						
Forest Drive	1693	68.6	?	21.9	0.56	3.12
Halbert	1757	65.8	2.6	26.3	0.70	2.51
Woldert	1730	62.7	0.0	28.8	0.72	2.19
Ferguson	4116	60.8	<1.0	27.9	0.61	2.17
GROUP IV, earliest Frankston phase, ca. A.D. 1400-1480						
41SM87	176	56.2	1.8	34.1	1.24	1.65
41HE4/55**	70	51.4	?	40.0	1.54	1.29
41SM90	85	50.6	2.9	31.8	2.20	1.60
Tomato Patch	912	49.2	?	41.7	1.50	1.21
41SM89	136	39.0	10.4	44.1	1.96	0.88
41SM88	95	37.9	?	49.5	1.53	1.31
Henderson Co. site***	116	37.1	5.4	41.4	1.21	0.90
Lang Pasture	2435	35.9	6.7	38.0	1.40	0.91
41AN7	119	35.3	3.5	35.3	2.11	1.0
Mitchell, D	54	32.1	0.0	33.3	1.37	1.50
41HE337	149	35.6	5.6	46.3	2.25	0.76
GROUP V, Middle Caddo period, ca. A.D. 1200-1400						
41SM73	165	26.1	?	72.7	2.61	0.37
M. S. Roberts	383	18.6	11.4	60.6	2.05	0.29
41SM404	446	16.0	8.5	60.7	1.73	0.26

Table 8. Comparative sherd assemblage data from Lake Palestine Caddo sites, nearby Caddo sites, and the M. S. Roberts site in the upper Neches River basin, cont.

Site	No. of Dec. Sherds	% Brushed	% bone-temper	% Wet-paste decorations	P/DR	Brushed/Wet paste ratio
GROUP V, Middle Caddo period, ca. A.D. 1200-1400, cont.						
White Mule	1404	18.5	1.5	63.7	2.61	0.29
41HE139	40	17.5	8.1	65.0	2.51	0.33
41HE139	40	17.5	8.1	65.0	2.51	0.33
41AN159	23	13.0	13.9	65.2	3.39	0.20
41SM273, Z1/2	256	10.9	28.8	70.0	3.97	0.16
41SM273, Z3	155	9.7	32.3	73.5	3.80	0.13
OLDEST SITE: GROUP VI, Early Caddo period, ca. A.D. 1000-1200						
Mitchell, A-C	56	1.3	12.0	65.7	1.71	0.03
41SM87	36	0.0	?	69.4	4.44	0.00

P/DR=plain to decorated sherd ratio

*sites with Patton Engraved sherds

**site is in the adjoining Coon Creek/Catfish Creek drainage in the Trinity River basin

***unrecorded site in the Caddo Creek valley

?=information not provided in Anderson et al. (1974)

This seriation suggests that the principal ancestral Caddo occupation of the M. S. Roberts site took place during the Middle Caddo period (see Table 8). This is based primarily on the relatively low proportion of sherds with brushed decorative elements in the assemblage (18.6 percent), the moderate P/DR (2.05), and the low ratio of brushed sherds to other wet paste sherds (0.29). None of the earliest Late Caddo period Frankston phase components have less than 32 percent brushed sherds in a decorated sherd assemblage; almost all have P/DR values less than 1.54, and have brushed to other wet paste sherd ratios that range from 0.76 to 1.65 (see Table 8).

Two burned mud dauber nest fragments come from ancestral habitation contexts at the M. S. Roberts site. The first is a small piece, with one empty nest cavity, from ST 34, 40-60 cm bs, about 10 m southeast of the southeastern part of the mound (see Figure 2). The other is a much larger fragment with at least two empty nest cavities (Figure 10) that was recovered in situ (with a bottom depth of 31 cm bs) from the profile of a burned structure context in Unit 1, Zone 2b (see Figure 5b).

In addition to one piece of ferruginous sandstone fore-cracked rock from Unit 1 (20-30 cm bs), three ground stone tools have been recovered from mound and non-mound contexts at the M. S. Roberts site (Table 9). The ground stone tools—all on a local ferruginous sandstone—include a mano fragment from 10 cm bs in Unit 1, a mano fragment from 10-20 cm bs in Unit 1, and a mano/pitted stone from Unit 2.

Figure 10. Mud dauber nest fragment from Unit 1, Zone 2b.

Table 9. Lithic artifacts from January 2016 investigations at the M. S. Roberts site.

Provenience (cm bs)	Lithic Debris	Ground stone	FCR	N
Surface	4	-	-	4
ST 26, 0-20	1	-	-	1
ST 27, 40-60	1	-	-	1
ST 34, 20-40	1	-	-	1
ST 35, 0-20	2	-	-	2
ST 35, 20-40	2	-	-	2
ST 36, 0-20	4	-	-	4
ST 42, 0-20	1	-	-	1
ST 44, 20-40	1	-	-	1
Unit 1, 0-10	1	1	-	2
Unit 1, 10-20	2	1	-	3
Unit 1, 20-30	5	-	1	6
Unit 2, 0-10	2	-	-	2
Unit 2, 10-20	6	-	-	6
Unit 2, 20-30	3	-	-	3
Unit 2, 30-40	3	-	-	3
Unit 2, 40-50	2	1	-	3
Totals	41	3	1	45

FCR=fire-cracked rock

The lithic debris in the assemblage (see Table 9) is predominantly comprised of pieces knapped from chert raw materials (80 percent), much of which was either available in Neches River gravels to the east of the site, or in stream gravels in drainages to the west of the Neches River. The cherts are of various colors, mainly shades of gray: very dark gray (n=1, 0 percent cortical), dark gray (n=6, 0 percent cortical), gray (n=12, 17 percent cortical), light gray (n=2, 0 percent cortical), dark grayish-brown (n=1, 0 percent cortical), brownish-gray chert (n=3, 0 percent cortical), grayish-brown (n=3, 67 percent cortical).

cal), dark brown (n=1, 100 percent cortical), reddish-brown (n=1, 0 percent cortical), brown (n=1, 100 percent cortical), bluish-gray (n=1, 0 percent cortical), and white (n=1, 0 percent cortical). Also found in the lithic debris assemblage are a few pieces (20 percent) of petrified wood (n=2, 50 percent cortical) and quartzite (n=6, 17 percent cortical). About 18 percent of the chert lithic debris has stream-rolled cortical remnants, compared to 25 percent of the petrified wood and quartzite lithic debris.

Animal bones and charred plant remains are not abundant in the archaeological deposits at the M. S. Roberts site (Table 10). What is preserved includes deer bones and teeth, charred nutshells, and various pieces of wood charcoal either from non-mound habitation contexts south of the mound or at various depths in Unit 1 in the northern mound lobe. Five samples of either charred nutshells or unburned animal bone and teeth have been submitted to D-AMS (Seattle, Washington) for conventional AMS radiocarbon dating of mound and non-mound habitation deposits.

Table 10. Animal bones and charred plant remains from the M. S. Roberts site.

Provenience (cm bs)	AB-burned	AB-unburned	NS	WC	N
Surface	2	1	-	-	3
ST 34, 20-40	1	-	-	-	1
ST 34, 40-60	1	1	-	-	2
ST 35, 40-60	-	1	2	-	3
Unit 1, 10-20	1	-	-	-	1
Unit 1, 20-30	1	-	-	4	5
Unit 1, 30-35	-	-	-	5	5
Unit 1, 37	-	4	-	-	4
Unit 1, 54	-	7	-	-	7
Unit 1, 77	3	-	-	-	3
Unit 1, 80	-	-	-	11	11
Unit 2, 20-30	-	-	3	4	7
Unit 2, 30-40	-	-	3	1	4
Unit 2, 40-50	-	-	2	10	12
Totals	9	14	10	35	68

AB=animal bone; NS=nutshell; WC=wood charcoal

Summary and Conclusions

Archaeological investigations were continued at the M. S. Roberts site (41HE8) in the upper Neches River basin in East Texas in January 2016, along with geophysical investigations completed by Dr. Duncan P. McKinnon (University of Central Arkansas, see elsewhere in this volume) and further aerial survey work by Arlo McKee (University of Texas-Dallas). This work was done with the permission and support of Jim and Denise Renfro, the landowners.

The archaeological work summarized herein focused on delimiting intact non-mound habitation areas at the site as well as investigating the northern and southern ends of the mound (to a depth of ca. 100-110 cm bs) for evidence of structures, different mound fill zones, and preserved plant and animal remains. The character of the decorated ceramic sherds in this work, as well as previous investigations, at the site suggest that the M. S. Roberts site was occupied during the Middle Caddo period, perhaps in the 14th century A.D. Samples of charred plant remains and animal bones recovered in the January 2016 work will provide definitive calibrated radiocarbon dates from both mound and non-mound contexts.

One of the units excavated in the mound (Unit 1) identified a zone (Zone 2b) with abundant charred plant remains and stains, as well as a large piece from a mud dauber nest, and this zone appears to represent the remains of a burned Caddo structure near the top of the mound. Mound zones were a combination of sandy loam and clay fills obtained from the nearby borrow pit, and are roughly comparable in character from one end of the mound to the other, except that no evidence for burned Caddo structures was apparent in the southern part of the mound; these remains may lie deeper in the mound, as was suggested by auger holes excavated to 140 cm bs in the mound in 2015 (Perttula et al. 2016:Figures 14).

Off-mound shovel testing identified a ca. 1200 square meter area southeast of the mound that has intact habitation deposits, including ceramic pipe sherds and a second piece of a burned mud dauber nest. The size of this habitation area, and the identification of a post hole in Unit 2, suggests that there may be at least one ancestral Caddo structure in this part of the M. S. Roberts site. While there are no midden deposits preserved here, small amounts of charred plant remains (i.e., nutshells and wood charcoal) were recovered throughout the archaeological deposits, along with ceramic vessel sherds and evidence of stone tool knapping.

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References Cited

- Hoffman, M. P.
1967 Ceramic Pipe Style Chronology Along the Red River Drainage in Southwestern Arkansas. *The Arkansas Archeologist* 8(1):4-14.
- Perttula, T. K.
2013 Caddo Ceramics in East Texas. *Bulletin of the Texas Archeological Society* 84:181-212.
- Perttula, T. K., with contributions by W. Troell
2016 The A. S. Mann (41HE7) and M. S. Roberts (41HE8) Sites in the Upper Neches River Basin, Henderson County, Texas. *Journal of Northeast Texas Archaeology* 59:1-19.
- Perttula, T. K. and M. Walters
2016 Recent Artifact Surface Collections from the M. S. Roberts (41HE8) Mound Site in the Upper Neches River Basin in East Texas. *Journal of Northeast Texas Archaeology* 59:69-74.

Perttula, T. K., A. McKee, M. Walters, and B. Nelson

2016 New Archaeological Investigations at the M. S. Roberts Site (41HE8) in the Caddo Creek Valley in Henderson County, Texas. *Journal of Northeast Texas Archaeology* 65:25-51.

Perttula, T. K., M. Walters, and B. Nelson

2016 *Caddo Ceramic Vessels from the T. M. Sanders Site (41LR2) on the Red River in Lamar County, Texas*. Special Publication No. 41. Friends of Northeast Texas Archaeology, Austin and Pittsburg.

Suhm, D. A. and E. B. Jelks (editors)

1962 *Handbook of Texas Archeology: Type Descriptions*. Special Publication No. 1, Texas Archeological Society, and Bulletin No. 4, Texas Memorial Museum, Austin. Reprinted in 2009, Gustav's Library, Davenport, Iowa.

Appendix 1, The Walter Brigham Site (41HE410)

Bo Nelson, Mark Walters, Kevin Stingley, and Timothy K. Perttula

The Walter Brigham site (41HE410) is an ancestral Caddo site located a short distance east of the M. S. Roberts site (41HE8). It was recorded during a January 2016 surface reconnaissance of landforms north of Caddo Creek in the upper Neches River basin, in an attempt to determine the spatial extent of the M. S. Roberts site.

This site is on a grass-covered lower ridge slope of an upland landform (400 ft. amsl), about 200 m west of a southward-flowing tributary of Caddo Creek. The landform has Wolfpen loamy fine sand sediments. The surface reconnaissance of the landform indicates the site covers a ca. 110 x 130 m area (3.5 acres) area; no shovel testing was conducted at that time to determine the depth or extent of its subsurface archeological deposits.

Archaeological materials recovered in gopher mounds and other surface exposed areas includes 16 Caddo ceramic vessel sherds and 12 pieces of lithic debris. The ceramic sherds are from grog (n=13, 81 percent) and grog-bone (n=3, 19 percent)-tempered vessels. There are six plain body sherds, one grog-tempered base sherd, and nine sherds from decorated vessels; the plain to decorated sherd ratio in this small assemblage is 0.78. Two of the sherds are from engraved fine ware vessels, including a rim with a horizontal engraved line beneath the lip and a body sherd with parallel engraved lines. The utility ware sherds include a body sherd with a single straight incised line and six body sherds with parallel brushing marks; these sherds are from Bullard Brushed vessels. The proportion of brushed sherds among all the decorated sherds (67 percent) is consistent with a post-A.D. 1480 Late Caddo period Frankston phase occupation (Perttula 2016).

The lithic debris from the surface of the Walter Brigham site includes pieces of chert (n=9), petrified wood (n=2), and quartzite (n=1). The chert pieces are gray (n=3, 67 percent cortical), light gray (n=2), grayish-brown (n=1), brownish-gray (n=1), white (n=1), and blackish-gray (n=1) colors. These chert raw materials were probably gathered from gravels in the Neches River, or came from sources in the Trinity River and other western stream beds.

References Cited

- Perttula, T. K.
2016 Utility Ware Ceramic Metrics and Hasinai Caddo Archaeology in East Texas. *Journal of Northeast Texas Archaeology* 70:61-68.

Appendix 2, February 2016 Surface Collection from the M. S. Roberts Site (41HE8)

Timothy K. Perttula, Mark Walters, and Bo Nelson

In February 2016, in conjunction with the archaeological reconnaissance of other properties on the north side of Caddo Creek, another surface collection of ancestral Caddo artifacts was obtained from the M. S. Roberts site (41HE8). The collection, described herein, has 121 ceramic vessel sherds, one chipped stone flake tool, and six pieces of lithic debris.

Ceramic Vessel Sherds

The February 2016 surface collection has ceramic vessel sherds from plain, utility, and fine ware vessels (Table A2-1). The plain to decorated sherd ratio in this assemblage is 2.27, and 65 percent of the decorated sherds are from utility wares. About 87.6 percent of the sherds are from grog-tempered vessels and the remainder are from bone-tempered vessels.

Table A2-1. Ceramic vessel sherds recovered in the February 2016 surface collection at the M. S. Roberts site.

Ware	Grog-tempered	Bone-tempered	N
Plain	73	11	84
Utility	22	2	24
Fine	11	2	13
Totals	106	15	121

The most common utility wares in this assemblage from the M. S. Roberts site—and in this assemblage for the site as a whole (see below)—have incised and punctated decorative elements (Table A2-2). The most distinctive sherd from an incised vessel has eight-to-left drawn diagonal incised lines on the vessel rim (Figure A2-1a). The punctated sherds have one or more rows of either fingernail or tool punctations. Brushed rim and body sherds comprise only 10.8 percent of the decorated sherds in this assemblage, and there are also two sherds (one from a carinated bowl) from incised-punctated vessels (Figure A2-1b-c) and a body sherd with a straight appliqued fillet.

Table A2-2. Decorative methods and elements in the utility and fine ware sherds recovered in the February 2016 surface collection.

Decorative method and decorative element	Rim	Body	N
<u>Utility Ware</u>			
<i>Appliqued</i>			
straight appliqued fillet	-	1	1
<i>Brushed</i>			
horizontal brushed	1	-	1
parallel brushed	-	3	3
<i>Incised</i>			
diagonal incised lines	1	-	1
opposed incised lines	-	3	3
parallel incised lines	-	1	1
straight incised line	-	1	1
<i>Incised-Punctated</i>			
incised triangle el. filled with tool punctations	-	2	2
straight incised line and adjacent circular punctated row	-	1	1
<i>Punctated</i>			
fingernail punctated rows	-	3	3
tool punctated rows	-	5	5
<u>Fine Ware</u>			
<i>Engraved</i>			
closely-spaced parallel engraved lines	-	2	2
closely-spaced curvilinear engraved lines	1	-	1
opposed engraved lines	-	1	1
parallel engraved lines	-	1	1
straight engraved line	-	6	6
triangle el. filled with horizontal and curvilinear engraved lines	-	1	1
<i>Slipped</i>			
int./ext. red-slipped	-	1	1
Totals	3	34	37

The fine ware sherds in the February 2016 surface collection include 12 engraved rim and body sherds and one red-slipped body sherd (see Table A2-2); one of the engraved sherds has a red pigment rubbed in the lines. One engraved sherd has opposed lines (see Figure A2-1f), while two others are from Poynor Engraved vessels. The first is a rim with closely-spaced curvilinear engraved lines (see Figure

Figure A2-1. Selected decorative elements on ceramic vessel sherds in the February 2016 surface collection from the M. S. Roberts site: a, incised rim; b, incised-punctated body sherds; c, punctated body sherd; d, engraved rim; e-f, engraved body sherds.

A2-1d), likely from a Poynor Engraved, *var. Cook* carinated bowl (see Perttula 2011:Figure 6-64c). The second sherd, also from a carinated bowl, has an engraved triangle element filled with horizontal and curvilinear engraved lines (see Figure A2-1e). This specific element occurs on Poynor Engraved, *var. Blackburn*, *var. Cook*, and *var. Lang* vessels in the upper Neches River basin (see Perttula 2011:Figure 6-64b-b', d, f-g').

Including the ceramic vessel sherds from the February 2016 surface collection at the M. S. Roberts site, 91 percent of the analyzed sherds are from grog or grog-bone-tempered vessels (Table A2-3). Of the 420 rim and body sherds known to have come from either a utility ware or fine ware vessel, 77.9 percent are from utility ware vessels, primarily jars. These vessels principally have incised or punctated decorative elements (representing 53.3 percent of the total number of decorated sherds in the assemblage), and sherds with brushing—as the sole decorative method or in combination with incised or punctated elements—comprise only 17.8 percent of the decorated sherds from the M. S. Roberts site.

Table A2-3. Summary of the ceramic sherd assemblage from the M. S. Roberts site, including the February 2016 surface collection.

Temper/ Decorative Method	N	%
Grog temper	919	88.5
Grog-bone temper	26	2.5
Bone temper	93	9.0
Subtotal, sherds analyzed for temper	1038	100.0
<i>Utility Ware</i>		
Appliqued	8	1.9
Brushed	59	14.0
Brushed-Incised	13	3.1
Brushed-Incised-Punctated	1	0.2
Brushed-Punctated	2	0.5
Incised	132	31.4
Incised-Punctated	20	4.8
Punctated	92	21.9
Subtotal, Utility Ware	327	77.9
<i>Fine Ware</i>		
Engraved	72	17.1
Slipped	21	5.0
Subtotal, Fine Ware	93	22.1
Totals, Decorated sherds	420	100.0

Source: Perttula 2016; Perttula and Walters 2016; Perttula et al. 2016; this article

The fine ware sherds from the M. S. Roberts site include sherds from either engraved or red-slipped vessels, including carinated bowls and bottles (see Table A2-3). They represent 22.1 percent of the decorated sherds in the assemblage as a whole. A few of the engraved sherds have an ochre-rich red clay pigment rubbed in the engraved lines.

Chipped Stone Artifacts

The flake tool in the surface collection is a gray chert expedient tool fragment with one use-worn edge. The use-worn edge is 10.2+ mm in length. Four of the recovered pieces of lithic debris are chert, probably of non-local origin of different colors: reddish-gray (n=1), brownish-gray (n=1), gray (n=1), and gray-dark gray (n=1); this latter piece has a stream-rolled cortex.

Summary and Conclusions

This appendix describes the ceramic vessel sherds and chipped stone artifacts recovered at the M. S. Roberts site by Mark Walters and Bo Nelson in February 2016. The character and range of the artifacts found in this surface collection are much the same as those documented in all previous archaeological investigations at the site, beginning with those by A. T. Jackson in 1931, and provide a more robust assemblage of the material culture remains made and used by ancestral Caddo peoples at this 14th to early 15th century A.D. site in the upper Neches River basin in East Texas.

References Cited

Perttula, T. K.

- 2011 The Ceramic Artifacts from the Lang Pasture Site (41AN38) and the Place of the Site within an Upper Neches River Basin Caddo Ceramic Tradition. In *Archeological Investigations at the Lang Pasture Site (41AN38) in the Upper Neches River Basin of East Texas*, assembled and edited by T. K. Perttula, D. B. Kelley, and R. A. Ricklis, pp. 145-320. Archeological Studies Program Report No. 129, Texas Department of Transportation, Environmental Affairs Division, Austin.