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## East Texas Caddo Ceramic Sherd Database

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## East Texas Caddo Ceramic Sherd Database

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# East Texas Caddo Ceramic Sherd Database

*Timothy K. Perttula*

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## INTRODUCTION

A considerable amount of effort has been expended over the years by archaeologists in the identification, description, and classification of ancestral Caddo ceramic vessels and sherds recovered from sites across East Texas, beginning with the masterful efforts of Alex D. Krieger (1941, 1946). These analyses have led to an appreciation of the stylistic, technological, functional, and morphological character of Caddo ceramics, as well as their age, and their role in the identification and scale of social networks of different Caddo communities in existence as early as ca. A.D. 850 to the early 19th century.

The purpose of the compilation of attribute-level data on Caddo ceramic sherds in East Texas is to build on the understandings already achieved through many years of study by numerous individuals regarding the stylistic, technological, and functional character of Caddo ceramics (see Perttula 2013i). This compilation is a distillation of 50+ years of the analysis and study of Caddo ceramics—particularly the quantification of the methods of decorations present on sherds from different assemblages—and a compilation that is useful for both present and future detailed studies of the sherds from ceramic vessel made by perhaps 40 or more generations of skilled Caddo potters.

## CERAMIC SHERD DATABASE

The East Texas Caddo ceramic sherd database (Table 1) presents uniform information on the character of ceramic assemblages on East Texas Caddo sites of different ages and components within sites collected from published reports, articles, and manuscripts (Figure 1). Ceramic data on a uniform set of attributes has been gathered from these sources of information, even when information is not available on all the attributes in the assemblages. The database contains assemblage-level information from 399 Caddo sites and/or components in East Texas and eight sites and/or components from sites along the Sabine River at Toledo Bend Reservoir in western Louisiana (Table 1). To date, the East Texas Caddo ceramic sherd database contains information on the occurrence and relative percentages of 248,148 decorated sherds from these sites/components, while there is similar information on 11,948 decorated sherds from the western Louisiana Caddo sites; the total number of decorated sherds in the database as of August 2014 is 260,096. For present purposes, the database entries were restricted to sites and assemblages with more than 40 decorated sherds in areas where decorated sherd assemblages were small (i.e., the upper Sulphur River drainage and upper Red River drainage), or with more than 90-100 sherds elsewhere in the region. On average, an individual site or assemblage in the database from East Texas contains ca. 620 decorated sherds, while the western Louisiana sites in the database contain ca. 1500 decorated sherds on average.

The database includes percentage information on the following attributes: (a) temper (i.e., grog, bone, shell, grog-bone, and sandy paste); (b) firing conditions (reduced, oxidized, incompletely oxidized, and reduced-oxidized); (c) rim profile (direct, inverted, and everted); (d) lip profile (rounded, flat, rounded-exterior folded, and beveled); (e) use of pigments (red and white); (f) decorative methods in utility wares (applied, applied-brushed, applied-incised, applied-punctated, brushed, brushed-incised, brushed-punctated, brushed-applied, incised, incised-punctated, neck banded, pinched, tool punctated, fingernail punctated,



Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMUWapplied-brushed	DMUWapplied-incised	DMUWapplied-punctated	DMUWbrushed	DMUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-applied	DMUWincised	DMUWincised-punctated	
41CP495		0.70		48.60	2.60	0.90		0.70	16.00	1.50
41CP72				19.50	6.30	1.80		0.90	15.00	4.40
41RA13				52.70					9.10	
41CE421			0.10	86.50	0.20	1.40			4.10	0.20
41CE423				91.90		1.10			5.20	
41RA13				18.40		2.60			13.40	
41CE426				91.90		1.90		0.60	1.30	
41CE429				87.70	0.40	2.20		0.20	3.70	
41NA223				35.40	4.20			2.10	10.40	
41CE324				75.00	5.90	1.10			3.70	
41AN87	1.50	0.30	0.90	51.10	1.50	0.30			12.80	3.00
41CE309	0.10			66.90	1.60	1.40		0.50	12.10	1.80
41HE337				34.90		0.70			18.80	6.00
41CE354				73.60	5.50	2.10		0.40	3.80	
41RK191				75.30	0.40	3.10			12.80	0.40
41RK197				67.90	1.60	2.40			7.30	0.80
41RK200				60.30	1.20	0.60			18.50	1.10
41CP230		0.30		27.00	5.60	1.80		0.30	15.70	1.30
41WD52		0.50	0.40	13.80	2.30	0.10		0.40	16.80	1.00
41FK107				2.40					19.40	2.40
41SM195									14.30	3.80
41TT650									38.90	11.10
41UR279				49.70	7.80				18.70	0.60
41CP245		0.80		20.30	3.20	3.20			18.80	2.40
41HS574				69.50		1.70		6.80	3.40	
41BW171									55.00	16.80
41WD46	0.90		0.40	49.50					13.50	4.40
41LR351									46.60	5.70
41SM442				6.90	1.40	1.40			38.90	2.80
41CE339				39.30	2.60				33.30	4.10
41CE445		1.30	1.30	48.80	1.30				25.00	5.00
41SM440		1.50		40.60		2.90			33.30	1.50
41SM442				9.10	0.30	1.20			34.80	3.80
41SM444		1.70		48.30	5.20	1.70			27.60	1.70
41CP239		1.80		48.20	7.30	1.20		1.80	9.80	1.20
41GG31		0.20		10.70		0.40		0.50	3.50	1.30
41MR6	1.50			59.10	0.70				4.40	0.70
41CP288				6.10					18.20	6.10
41TT758									24.60	2.90
41FK107				2.30					18.50	4.20
41CP490		1.00		42.90	7.30	0.50		1.00	12.70	1.50
41CE467		0.30	0.30	83.00	1.30	1.00				0.30
41CP493				18.60		2.30			23.00	9.30
41CP8, Area A				37.90	12.10	3.40			15.50	
41CP496	2.80			29.60	7.00	2.10			17.60	2.10
41HP237				7.10	0.70				2.80	
41HP238				2.40	4.80					
41HP240	0.20	0.10	0.50	2.40	0.60	0.20		0.20	2.00	0.10
41WD208		1.10	1.10	8.00				1.10	3.40	1.10
41SM193				27.80		7.70			13.40	7.00
41SM55				20.40	1.00	16.30			20.80	5.50
41HS524				3.20	0.40	0.40			43.60	7.80
41PN149				21.30		1.70			23.70	11.70
41RK476	1.30			5.30					40.00	9.30
41NA327				72.70	2.00	3.00			5.10	1.00
41SM56									25.90	11.20
41SA135				49.80		0.60			13.50	2.40
41CP71		1.80		38.60		1.80			10.50	1.80
41CP490	2.90	0.50	1.00	48.50	3.40	0.50			12.10	0.50
41TT891									22.00	6.80
41TT892				1.80					18.40	5.30
41LR351									38.50	6.80
41UR10		3.70		39.30		5.70		2.00	9.00	0.70
41CE19				0.20					38.30	19.00
41HP78										
41DT16				5.60					55.60	22.20
41DT52				10.50	8.80				72.00	
41HP102										
41DT1										
41HP105										
41DT80										
41HP105										
41HP78										
41DT80										
41AN19				74.20					6.10	
41NA144		1.20		64.60					14.60	2.40
41SY81				10.70					42.70	14.70
41HS11				50.80	10.70				8.80	
41MR211				60.30					15.90	3.20
41HS835			2.50	72.50	7.50			2.50	7.50	
41HE22				31.60						
41HE166				18.50						
41HE185				50.70						
41HE184				68.50						
41HE80				62.70						
41AN67				61.40						
41AN70				65.90						
41CE30				75.50						
41CE86				75.50						
41CE19									14.00	6.10
41CE19, Late				83.10	0.60	0.50		0.80	5.10	1.80
41SB50				46.30					40.30	4.60
41SA89				28.10					27.60	8.80
41SA94				29.10					6.10	3.70
41SB36				9.60					61.30	7.30
41NA11				47.00					12.60	7.00



Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMFWengraved-brushed	DMFWred-slipped	DMFWtrailed	Other decorative method	No. of decorated sherds	Reference	Estimated age
41CP495		3.10			764	Perttula 2013a	ca. A.D. 1500-1550
41CP72		7.10			113	Perttula 2013b	ca. A.D. 1200-1430
41RA13		1.80		1.8 [Grooved]	55	Perttula 2012	ca. A.D. 1750
41CE421					1805	Walters and Perttula 2012	ca. 1680-1720
41CE423					97	Walters and Perttula 2012	ca. 1680-1720
41RA13					719	Story et al. 1967	ca. A.D. 1750
41CE426					160	Walters and Perttula 2012	ca. 1680-1720
41CE429				1.1 [Grooved]	465	Walters and Perttula 2012	ca. 1680-1720
41NA223					48	Perttula 2008a	ca. A.D. 1750
41CE324	1.10				188	Perttula and Middlebrook 2009	ca. A.D. 1600-1650
41AN87					335	Perttula 2009a	ca. A.D. 1400-1450
41CE309		0.10			1369	Perttula 2009b	ca. A.D. 1400-1560
41HE337		1.30		0.7 [Lip notched]	149	Perttula 2009c	ca. A.D. 1400-1500
41CE354		0.20			474	Perttula 2009d	ca. A.D. 1650-1800
41RK191		0.40			226	Perttula et al. 2009	ca. A.D. 1700-1730
41RK197					124	Perttula et al. 2009	ca. A.D. 1700-1730
41RK200					2282	Perttula et al. 2009; Marceaux	A.D. 1720-1730
41CP230		13.40			1034	Nelson and Perttula 2003a	A.D. 1430-1600
41WD52		24.30	0.20		820	Perttula 2005a	ca. A.D. 1430-1550
41FK107		2.40		0.5 [Lip notched]	212	Nelson and Perttula 2006	ca. A.D. 1200-1430
41SM195					105	Walters 2003	ca. A.D. 1315-1440
41TT650		2.80			36	Nelson et al. 2004	ca. A.D. 1000-1200
41UR279		2.60			155	Perttula et al. 2004	ca. A.D. 1430-1500
41CP245		18.10			127	Perttula and Nelson 2006a	ca. A.D. 1000-1400
41HS574					59	Perttula and Nelson 1997	ca. A.D. 1200-1430
41BW171					262	Perttula 2005b	ca. A.D. 1300-1400
41WD46		5.20			229	Perttula et al. 1993a	ca. A.D. 1400-1430
41LR351		12.60			159	Perttula 2013c	ca. A.D. 1150-1300
41SM442		7.00			72	Perttula and Walters 2012	ca. A.D. 1200-1400
41CE339					267	Perttula et al. 2012a	ca. A.D. 1400-1480
41CE445					80	Perttula et al. 2012a	ca. A.D. 1400-1480
41SM440					69	Perttula and Thacker 2014	ca. A.D. 1400-1450
41SM442		14.10		0.3 [Lip notched]	353	Perttula and Thacker 2014	ca. A.D. 1000-1300
41SM444					58	Perttula and Thacker 2014	ca. A.D. 1400-1480
41CP239		0.60			164	Perttula 2013d	ca. A.D. 1430-1600
41GG31	0.70			0.2 [Lip notched]	1125	Perttula et al. 2013a	ca. A.D. 1550-1680
41MR6		2.20	0.70		137	Perttula et al. 2012b	ca. A.D. 1600-1680
41CP288					99	Perttula et al. 2012c	ca. A.D. 1200-1300
41TT758					69	Perttula et al. 2012c	ca. A.D. 1000-1200
41FK107		2.00	0.20		651	Perttula and Nelson 2012a	ca. A.D. 900-1400
41CP490					205	Perttula and Nelson 2012b	ca. A.D. 1430-1550
41CE467				3.0 [Grooved]	305	Perttula et al. 2013b	ca. A.D. 1680-1720
41CP493		4.70			43	Perttula 2013e	ca. A.D. 1200-1400
41CP8, Area A		3.40			58	Perttula 2013f	ca. A.D. 1430-1680
41CP496		8.40			142	Perttula 2013g	ca. A.D. 1430-1600
				0.4 [Lip notched];			
				5.7 [CCI]	283	Perttula 2009e	ca. A.D. 1550-1680
41HP237		2.50	0.40		42	Perttula 2009e	ca. A.D. 1550-1680
41HP238		7.10			1347	Perttula 2009e	ca. A.D. 1550-1680
41HP240		14.70	0.60	2.9 [CCI]	87	Perttula et al. 1993b	ca. A.D. 1430-1600
41WD208		2.20			597	Walters and Haskins 1998	ca. A.D. 1300-1430
41SM193		1.00			730	Walters and Haskins 2000	ca. A.D. 1200-1400
41SM55		0.80			562	Perttula 2000	ca. A.D. 1000-1200
41HS524		2.00			300	Haskins and Walters 2001	ca. A.D. 1400-1650
41PN149					75	Walters 2001	ca. A.D. 1000-1200
41RK476		1.30			99	Perttula et al. 2011a	ca. A.D. 1680-1720
41NA327	1.00				286	Walters 2009	ca. A.D. 1000-1200
41SM56					468	Middlebrook 2010	ca. A.D. 1400-1450
41SA135					57	Perttula 2010a	ca. A.D. 1500-1680
41CP71					206	Perttula et al. 2010a	ca. A.D. 1550-1680
41CP490		1.00	0.50	0.5 [Lip notched]	59	Perttula et al. 2010a	ca. A.D. 1000-1200
41TT891		1.70			114	Perttula et al. 2010a	ca. A.D. 1000-1200
41TT892		0.90			117	Perttula 2010a	ca. A.D. 1000-1150
41LR351		15.40			301	Jelks and Tunnell 1959	ca. A.D. 1430-1550
41UR10						Thurmond and Kleinschmidt	
				0.6 [Grooved]	803	1979	ca. A.D. 900-1300
41CE19					15	McGregor et al. 1996	ca. A.D. 980-1130
41HP78					18	Doehner et al. 1978	ca. A.D. 1200-1300
41DT16					57	Doehner et al. 1978	ca. A.D. 1200-1300
41DT52					187	Doehner and Larson 1978	ca. A.D. 900-1200
41HP102					1	Hyatt and Doehner 1975	ca. A.D. 900-1200
41DT1					18	Hyatt and Doehner 1975	ca. A.D. 900-1200
41HP105					8	Hyatt and Doehner 1975	ca. A.D. 900-1200
41DT80					26	Hyatt et al. 1974	ca. A.D. 1000-1200
41HP105					5	Hyatt et al. 1974	ca. A.D. 900-1200
41DT80					15	Hyatt et al. 1974	ca. A.D. 900-1200
41AN19		0.10			5868	Kleinschmidt 1982	ca. A.D. 1400-1650
41NA144					82	Corbin and Kising 1983	ca. A.D. 1400-1650
41SY81		5.30			75	Robinson 1997	ca. A.D. 900-1200
41HS11		4.00			1048	Wormser 1991	ca. A.D. 1550-1680
41MR211					63	Parsons et al. 2002	ca. A.D. 1800-1838
41HS835					40	Perttula 2002a	ca. A.D. 1430-1680
41HE22					133	Anderson et al. 1974	ca. A.D. 1400-1650
41HE166					1404	Anderson et al. 1974	ca. A.D. 1200-1400
41HE185					912	Anderson et al. 1974	ca. A.D. 1400-1650
41HE184					1693	Anderson et al. 1974	ca. A.D. 1400-1650
41HE80					1730	Anderson et al. 1974	ca. A.D. 1400-1650
41AN67					4116	Anderson et al. 1974	ca. A.D. 1400-1650
41AN70					1590	Anderson et al. 1974	ca. A.D. 1400-1650
41CE30					622	Anderson et al. 1974	ca. A.D. 1400-1650
41CE86					220	Anderson et al. 1974	ca. A.D. 1400-1650
41CE19					379	Fields 1978	ca. A.D. 900-1300
41CE19, Late					488	Fields and Thurmond 1980	ca. A.D. 1400-1650
41S850					4452	Jelks 1965	ca. A.D. 1400-1680
41SA89					3409	Jelks 1965	ca. A.D. 1200-1400
41SA94					1960	Jelks 1965	ca. A.D. 1200-1400
41S836					550	Jelks 1965	ca. A.D. 1200-1400
41NA11					2504	Jelks 1965	ca. A.D. 1400-1680





Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMUWapplied-brushed	DMUWapplied-incised	DMUWapplied-punctated	DMUWbrushed	DMUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-applied	DMUWincised	DMUWincised-punctated
41SA123				32.10				24.70	2.00
41SB8				57.80				23.90	3.30
41SA69				15.70				45.70	4.30
41SA116				27.20				41.70	4.50
41BW3					8.60			14.4 [Trailed-I]	
41UR118				50.00		3.00		7.90	1.80
41UR133				50.00	0.40	1.50		15.00	1.10
41UR106				30.80		1.80		17.00	2.20
41UR130				63.50		1.90		7.70	
41UR109				36.60		2.10		2.80	1.40
41UR105				23.90	0.60	1.20		17.10	4.40
41UR116			0.80	19.40	0.40	0.80		14.50	1.50
41UR114				53.10	2.00	6.10		10.20	2.00
41BW553				1.40		1.40		58.10	8.10
41TT670						1.00		53.10	4.10
41HS240				77.80			4.40	11.10	2.20
41CP408		0.80	0.80	12.50	2.30			24.20	6.30
41NA231		0.10	0.20	34.50	3.30	3.00	1.30	15.90	7.80
41NA235		0.70		41.40	5.70	3.60	0.80	22.50	3.70
41NA236		0.20		67.30	4.90	1.80	1.70	12.00	1.00
41NA242		0.20		30.00	1.60	4.00	0.80	14.90	7.60
41NA285				11.60	0.50	1.10	0.80	24.10	9.40
41NA338				72.80			0.40	3.20	
41NA21				78.90	1.00	2.40		1.30	
41NA304				44.10	0.20	3.30	1.00	13.40	2.50
41NA303				37.80		2.80		10.20	4.80
41HP106		0.20	0.70	3.70	0.30	0.20		8.40	7.60
41RK170		0.20		2.80	0.20	2.00	0.20	25.70	16.00
41CP304		0.20	0.10	39.80	3.20	2.00	0.80	13.50	2.50
41HS15				66.10				9.00	
41NA49		0.10		55.00	3.90	5.60	1.60	13.20	4.20
41HE70				24.70	1.20			25.90	7.20
41VN6				51.40				20.60	1.10
41DT1								39.20	5.90
41SM73				23.30	3.00			35.90	
41SM74				74.70	1.10			2.20	
41SM76				68.90				16.70	
41SM82				86.70				4.00	
41SM87								42.90	
41SM89				37.90				31.60	2.10
41SM90				60.50		1.20		13.60	2.50
41SM91				82.70				6.10	
41HE22				76.50				12.30	1.30
41CE39				75.20				15.90	
41WD529				8.70		0.40	0.20	4.00	0.10
41WD51				0.70				3.40	
41HE114				84.00		0.20		5.00	
41HP175			2.90			0.40		2.70	
41RA5				7.90				9.50	
41BW5			0.20	1.30				0.20	48.10
41HS16				8.00		1.10		43.20	30.70
41SA83				44.10		6.90	0.20	13.90	8.00
41LR1									38.70
41RA8								63.80	
41GG33								90.00	1.30
41RK3				40.40		13.90		2.50	11.40
41BW169				6.10	1.00			13.10	
41BW716				47.40				15.80	
41PN175				52.70	4.40	0.30	0.70	25.70	1.70
41CP20				38.70				22.60	12.90
41RK19				40.40				35.60	
41RK30				8.60				60.00	
41RK39				58.30				31.30	
41SM54			2.20	1.10		1.10		17.80	6.70
41HP1				2.60				12.80	
41TT13				11.20	0.60			7.30	
41DT11				3.70				37.00	
41DT21				16.70				16.70	25.00
41DT54								12.50	
41DT63									
41WD73								43.20	
41WD482				0.10				51.50	
41WD495								20.50	
41WD538								12.50	
41WD450								42.60	
41WD503								47.00	
41WD109				3.60				24.80	
41UR142								49.00	4.00
41UR136				41.30				16.20	
41HE139			2.50	17.50				37.50	2.50
41AN38				76.00		4.00	2.00	6.00	
41SM243				26.10		4.50		27.90	13.50
41RK4								31.30	10.30
41SM325	0.10		0.10	17.00	1.90	2.40		35.80	8.80
41TT769				10.20		2.60	1.00	10.20	3.60
Hickory Creek #2				49.30	0.70	4.30		12.10	6.40
41WD75								91.70	
41WD524				68.90				3.30	
41RA48				1.60				68.20	
41WD74				11.10				84.20	
41RR15									
41RR204									2.70
41CP55		0.30		67.00	2.40	0.30		8.10	
41UR271				66.70			4.80	4.80	
41CE19, Village								32.10	9.90
41CE19, Md. A								35.40	21.00
41CE19, Md. B								34.80	14.90

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	DMUWneck banded	DMUWpinched	DMUWtoot punctated	DMUWfingernail punctated	DMUWcircular punctated	DMUWcane punctated	DMUWridged	DMFeng-punct.	DMFWengraved	DMFWengraved-appliqued
41SA123									11.00	
41S88									3.90	
41SA69										
41SA116									13.90	
41BW3	1.70		4.40					2.20	39.50	0.30
41UR118	0.30		12.10	0.90					18.80	
41UR133		0.60	4.20	0.20					11.40	
41UR106	0.40	0.70	9.40	1.40					16.30	
41UR130			5.80						19.20	
41UR109			4.20						22.00	
41UR105			9.00	7.20					20.50	
41UR116		1.10	9.10	9.10					18.40	
41UR114			8.20						10.70	
41BW553		1.40							4.10	
41TT670			1.00	29.60					2.20	
41HS240									28.10	
41CP408			7.80	10.20		0.80		0.80	17.60	
41NA231	0.40	1.30	10.60	0.80	0.50	0.60			9.00	
41NA235		1.30	6.90	0.60	0.10	0.20			2.40	
41NA236		0.80	2.90	0.70				0.10	12.40	
41NA242		3.30	18.00	1.00	0.60	1.50		0.30	20.60	
41NA285		1.10	8.70	7.60	1.10	0.10			15.90	
41NA338	0.40								14.90	
41NA21									17.50	
41NA304									27.40	
41NA303									10.80	
41HP106			10.70	2.40	2.70			0.60	22.00	
41RK170			16.00	7.70	0.60	5.50			19.40	
41CP304	2.30	0.10	4.20	2.10				0.10	8.10	
41HS15		2.40	4.20	3.60			0.70		6.10	
41NA49		0.10	7.70	1.40				0.20	10.20	
41HE70		3.00	28.90	3.00					8.00	
41VN6	0.60	0.60	17.70						17.60	
41DT1			15.70	21.50					0.60	
41SM73			2.40	33.50					4.40	
41SM74		12.10							5.60	
41SM76				8.90					9.30	
41SM82									28.60	
41SM87				1.10	1.10				11.60	
41SM89									17.30	
41SM90									3.90	
41SM91		1.10							7.00	
41HE22	0.40	1.80							4.40	
41CE39									41.60	
41WD529	14.40		0.20	2.80					40.10	
41WD51	26.00							0.70	5.60	
41HE114	0.20	1.60							32.50	
41HP175		0.40	1.20	22.00					77.80	
41RAS		1.60							41.50	
41BW5									8.00	
41HS16			4.50	3.40					8.60	
41SA83		1.20							53.00	
41LR1									13.80	
41RA8					5.00				3.80	
41GG33					2.50				26.60	
41RK3									46.40	
41BW169	4.00		3.00						36.80	
41BW716									7.80	
41PN175			3.00	2.40	0.30	0.30			16.10	
41CP20									1.90	
41RK19									2.90	
41RK30									2.10	
41RK39									14.40	
41SM54		1.10	11.10	3.30					74.40	
41HP1			2.60						57.30	
41TT13	3.90	3.40							14.80	
41DT11			3.70	14.80					8.30	
41DT21				8.30						
41DT54			6.30							
41DT63			12.50	50.00						
41WD73									8.90	
41WD482	0.10								17.70	
41WD495	4.80								43.30	
41WD538									47.50	
41WD450	3.00								26.50	
41WD503	4.40								26.50	
41WD109	2.60								44.80	
41UR142				18.00					24.00	
41UR136	3.20								19.00	
41HE139	2.50		15.00	2.50					12.50	
41AN38			4.00						8.00	
41SM243		1.80	1.80	6.30					18.00	
41RK4			4.60	32.10					21.90	
41SM325		0.40	14.90	0.70		0.70			16.30	
41TT769	6.60		26.00	1.00	1.50				16.30	
Hickory Creek #2		1.40							17.90	
41WD75										
41WD524									18.90	
41RA48									7.90	
41WD74									4.60	
41RR15	4.20									
41RR204	52.00								4.30	
41CP55	0.30		3.60						15.70	
41UR271									14.30	
41CE19, Village	1.10	1.80	0.10	24.00					26.90	
41CE19, Md. A	2.10			10.00					31.40	
41CE19, Md. B	0.80			23.10					26.50	

Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMFWengraved-brushed	DMFWred-slipped	DMFWtrailed	Other decorative method	No. of decorated sherds	Reference	Estimated age
41SA123					1033	Jelks 1965	ca. A.D. 1400-1680
41SB8					180	Jelks 1965	ca. A.D. 1400-1680
41SA69					70	Jelks 1965	ca. A.D. 1200-1400
41SA116					1193	Jelks 1965	ca. A.D. 1400-1680
41BW3			17.20		362	Perttula 2005c	ca. A.D. 1300-1650
41UR118					330	Nichols et al. 1997	ca. A.D. 1430-1550
41UR133					474	Nichols et al. 1997	ca. A.D. 1300-1550
41UR106					276	Nichols et al. 1997	ca. A.D. 1430-1550
41UR130					52	Nichols et al. 1997	ca. A.D. 1430-1550
41UR109					142	Nichols et al. 1997	ca. A.D. 1430-1550
41UR105					322	Nichols et al. 1997	ca. A.D. 1200-1550
41UR116					263	Nichols et al. 1997	ca. A.D. 1200-1550
41UR114					49	Nichols et al. 1997	ca. A.D. 1430-1550
41BW553					74	Largent et al. 1997	ca. A.D. 1200-1500
41TT670					98	Largent et al. 1997	ca. A.D. 1000-1200
41HS240					45	Perttula and Nelson 2002a	ca. A.D. 1300-1400
41CP408		4.70			128	Sherman 2004	ca. A.D. 1200-1400
41NA231	0.10				834	Perttula 2008b	ca. A.D. 1200-1400
41NA235					1263	Perttula 2008b	ca. A.D. 1400-1650
41NA236					1060	Perttula 2008b	ca. A.D. 1400-1650
41NA242		0.10			1063	Perttula 2008b	ca. A.D. 1200-1400
41NA285					1132	Perttula 2008b	ca. A.D. 900-1300
41NA338				0.7 [Grooved]	283	Jackson et al. 2012	ca. A.D. 1720-1730
41NA21				1.4 [Grooved]	888	Jackson et al. 2012	ca. A.D. 1680-1730
41NA304					486	Jackson et al. 2012	ca. A.D. 1750-1830
41NA303					462	Jackson et al. 2012	ca. A.D. 1200-1800
41HP106			0.70	0.2 [CCI]	619	Perttula 1999	ca. A.D. 1000-1400
41RK170		0.30		0.8 [Lip notched]	651	Perttula and Nelson 2003a	ca. A.D. 1150-1400
41CP304		7.10			3952	Perttula 2005d	ca. A.D. 1430-1600
41HS15		0.70			7588	Fields and Gadsu 2012	ca. A.D. 1350-1650
41NA49					1944	Perttula 2009f	ca. A.D. 1200-1450
41HE70					166	Story 1965	ca. A.D. 1430-1600
41VN6					175	Johnson 1962	ca. A.D. 1400-1650
41DT1					51	Johnson 1962	ca. A.D. 900-1200
41SM73		0.60	0.60		167	Johnson 1961	ca. A.D. 1400-1650
41SM74					91	Johnson 1961	ca. A.D. 1400-1650
41SM76					90	Johnson 1961	ca. A.D. 1400-1650
41SM82					75	Johnson 1961	ca. A.D. 1400-1650
41SM87		2.90			35	Johnson 1961	ca. A.D. 1400-1650
41SM89		1.10			95	Johnson 1961	ca. A.D. 1400-1650
41SM90					81	Johnson 1961	ca. A.D. 1400-1650
41SM91					179	Johnson 1961	ca. A.D. 1400-1650
41HE22					228	Johnson 1961	ca. A.D. 1400-1650
41CE39					113	Johnson 1961	ca. A.D. 1400-1650
41WD529		16.50			932	Perttula and Skiles n.d.	ca. A.D. 1430-1600
41WD51		11.60			147	Perttula and Skiles n.d.	ca. A.D. 1430-1680
41HE114					827	Shafer 1981	ca. A.D. 1400-1650
41HP175		20.00		0.6 [Cord impressed]	514	Fields et al. 1994a	ca. A.D. 1400-1500
41RA5					63	Duffield and Jelks 1961	ca. A.D. 1760-1830
41BW5		2.80	3.20		468	Miroir et al. 1973	ca. A.D. 1700-1730
41HS16				1.1 [Lip notched]	88	Webb et al. 1969	ca. A.D. 900-1400
41SA83		0.60			510	Davis and Horn 1964	ca. A.D. 1450-1600
41LR1					1450	Harris et al. 1965	ca. A.D. 1700-1730
41RA8				1.7 [Lip notched]	58	Duffield 1961	ca. A.D. 1200-1400
41GG33					80	Jones 1957	ca. A.D. 900-1200
41RK3					79	Jones 1968	ca. A.D. 1700-1830
41BW169			15.20	3.0 [Trailed-incised]	99	Sundermeyer et al. 2008	ca. A.D. 1500-1680
41BW716					19	Sundermeyer et al. 2008	ca. A.D. 1650-1680
41PN175		0.30			296	Cliff and Perttula 2002	ca. A.D. 1200-1450
41CP20		9.70			31	Hunt et al. 1996	ca. A.D. 1430-1680
41RK19					104	McDonald 1972	ca. A.D. 1200-1450
41RK30					35	McDonald 1972	ca. A.D. 1200-1450
41RK39					48	McDonald 1972	ca. A.D. 1200-1450
41SM54		38.90			90	Perttula and Walker 2008	ca. A.D. 1200-1450
41HP1					39	Scurlock 1962	ca. A.D. 1550-1680
41TT13		6.20	1.70		178	Rogers et al. 2003	ca. A.D. 1550-1680
41DT11		3.70			27	Gadus et al. 1992	ca. A.D. 900-1200
41DT21					12	Gadus et al. 1992	ca. A.D. 900-1200
41DT54		25.00			16	Gadus et al. 1992	ca. A.D. 900-1400
41DT63		25.00			8	Gadus et al. 1992	ca. A.D. 1200-1400
41WD73		5.60			213	Bruseth and Perttula 1981	ca. A.D. 900-1200
41WD482		7.40			2490	Bruseth and Perttula 1981	ca. A.D. 900-1200
41WD495		2.20			229	Bruseth and Perttula 1981	ca. A.D. 1430-1680
41WD538		7.50			40	Bruseth and Perttula 1981	ca. A.D. 1430-1680
41WD450		5.90			68	Bruseth and Perttula 1981	ca. A.D. 1000-1200
41WD503		5.50			181	Bruseth and Perttula 1981	ca. A.D. 1000-1200
41WD109		3.30		2.0 [CCI]	306	Bruseth and Perttula 1981	ca. A.D. 1200-1400
41UR142		1.50			68	Nelson et al. 1996	ca. A.D. 1200-1400
41UR136					247	Nelson and Perttula 1993	ca. A.D. 1430-1600
41HE139		5.00			40	Cliff et al. 2004	ca. A.D. 1000-1400
41AN38					50	Perttula et al. 2007	ca. A.D. 1450-1650
41SM243					111	Walters 2006	ca. A.D. 1200-1400
41RK4					681	Bruseth and Perttula 2006	ca. A.D. 980-1250
41SM325		0.30		0.1 [Lip notched]	693	Walters 2008	ca. A.D. 1200-1400
41TT769		13.30			196	Perttula et al. 2010b	ca. A.D. 1430-1600
Hickory Creek #2					140	Perttula 2011a	ca. A.D. 1300-1430
41WD75		8.30			12	Bruseth and Perttula 1980	ca. A.D. 1000-1300
41WD524		2.20			90	Bruseth and Perttula 1980	ca. A.D. 1430-1680
41RA48		22.20			63	Bruseth and Perttula 1980	ca. A.D. 1000-1300
41WD74					108	Bruseth and Perttula 1980	ca. A.D. 1000-1200
41RR15		95.80			24	Reese 2001	ca. A.D. 1400-1680
41RR204		2.00			2051	Kenmotsu 2005	ca. A.D. 1400-1680
41CP55					332	Perttula et al. 2014a	ca. A.D. 1430-1550
41UR271					21	Campbell 2001	ca. A.D. 1430-1680
41CE19, Village		1.60			2220	Stokes and Woodring 1981	ca. A.D. 900-1300
41CE19, Md. A					10654	Stokes and Woodring 1981	ca. A.D. 900-1300
41CE19, Md. B					256	Stokes and Woodring 1981	ca. A.D. 900-1300



Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMUWapliqued-brushed	DMUWapliqued-incised	DMUWapliqued-punctated	DMUWbrushed	DMUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-appliqued	DMUWincised	DMUWincised-punctated
41AN1				11.80	4.40	16.20		10.30	
41AN2				2.40			2.40	17.10	2.40
41AN8				62.00	1.90	2.80		2.80	0.90
41AN23				45.70					
41AN32				51.90		1.90		1.90	
41CE3				75.00	1.70	6.70			
41CE4				81.30		1.30			
41CE8						16.00		10.70	2.70
41AN38		0.04		35.60	1.80	1.70	0.10	18.60	5.60
41LR170								45.50	
41LR186								33.30	11.10
41LR187				2.40				4.90	2.40
41NA27				89.60	0.60			1.30	0.20
41CP10				15.90				23.40	
41DT80		1.40						16.90	
41DT124								50.00	17.90
41RR48								69.60	4.30
41LR60								63.10	
41LR39								46.40	5.50
41RK19			0.20	44.90	0.10	0.20	0.50	15.90	
41RK21				79.20				3.00	
41RK32				8.30				21.70	1.70
41RK36				61.50				11.50	
41RK39				58.80				16.50	3.10
41RK214	1.10	0.10	0.03	13.90	0.40	4.80		19.40	9.50
41GG33				85.90	13.90	2.50	9.20	66.40	14.40
41GG33								19.70	9.60
41SY92				37.60				29.80	6.00
41AN51			0.10	1.90	0.30			13.90	1.40
41CP71		0.70		44.40	4.50	2.70	0.50		
41HS74				27.40		0.10	0.10	19.40	7.80
41BW5		0.20		2.40				41.20	
41LR2								36.30	
41RR14				0.30				7.90	
41RR16								44.30	6.40
41RR16						0.10		5.30	4.40
41RR11		0.70	1.50					21.60	8.90
41RR11				8.30				13.90	
41RR236								5.20	
41RR248			1.30					0.60	4.50
41RR290								20.00	
41BW3				1.00	0.30		0.30	13.30	2.30
41TT672				27.40	1.60			32.20	3.20
41NA49				51.60	3.80	2.40		12.60	3.80
41HO50				69.40			1.20	14.10	3.50
41TT653				25.00		1.90		28.80	3.80
41RR16								39.60	1.30
41RR16				0.70				2.70	1.20
41CE19				1.60				43.70	5.80
41DT16								41.20	
41MR2				5.40		11.70	6.40	15.80	
41UR11	0.50			50.80		4.80	6.20	12.80	3.00
41MR12				48.80				7.40	
41MR1	0.40		0.30	70.00		4.50	1.50	8.80	0.60
41UR30								35.30	3.30
41TT653	1.10		0.40	42.60	2.40	0.80	0.20	15.80	3.90
41RK214				22.70	4.40			28.10	2.60
41RK215					4.20			33.30	
41RK216				16.70	3.30			36.70	6.70
41NA235				36.40	9.70	7.20	1.00	19.50	2.10
41NA236	0.70			67.10	3.40	3.40	1.40	19.10	2.10
41NA244				5.90	4.40	1.50	1.50	17.60	7.40
41NA248				14.40	2.40			30.10	4.80
41NA264				74.50	4.30	2.10		4.30	
41NA285				9.80	1.60	0.80		29.40	7.40
41NA243				65.90	4.50	9.10		9.10	
41NA247				16.20	5.40	2.70		24.30	21.60
41CP257				27.10				1.20	
41CP272				37.00		3.30		14.10	4.30
41FK107				1.90				13.40	3.20
41TT804					4.50			13.60	
41TT310				41.40	3.40			24.10	3.40
41HS573				65.80				4.70	0.70
41HS574				36.20				5.20	2.40
41HS843				43.90				17.10	4.50
41HS844				37.20				22.30	0.80
41HS846				25.60				23.80	10.70
41HS588		0.10		63.10		2.80	1.50	9.80	4.60
41FT425				2.70	0.50			30.30	4.80
41DT11								42.90	7.10
41NA60	0.05			72.30	2.10	0.90	0.30	5.20	0.30
41TT372			0.70	19.20	4.40	0.70		34.70	0.30
41CE354				71.10	1.30	1.30		7.90	
41CE354				73.60	5.50	2.90	0.40	3.80	
41LR11								31.60	
41LR31								24.60	
41MX5		0.20		3.30	3.90			34.30	4.90
41HO91				66.70			2.60	7.70	
41CE461				83.70				2.00	
41NA15				76.30	1.10	0.70	0.40	6.00	0.30
41HO263				49.10		9.10		12.70	3.60
41NA321				63.00	3.90	0.60	1.30	6.50	1.90

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	DMUWneck banded	DMUWpinched	DMUWtoot punctated	DMUWfingernail punctated	DMUWcircular punctated	DMUWcane punctated	DMUWridged	DMFeng-punct.	DMFWengraved	DMFWengraved-appliqued
41AN1	8.80	2.90	7.30						38.30	
41AN2	17.10		7.30	7.30					39.00	
41AN8	0.90	0.90		1.90					25.90	
41AN23		2.90							51.40	
41AN32			1.90						42.30	
41CE3		6.70							10.00	
41CE4	2.70								18.70	
41CE8	18.70	4.00	2.70						45.30	
41AN38	0.10	0.40	10.40	0.50		0.20		0.40	20.70	
41LR170				9.10		18.20			27.30	
41LR186		11.10		11.10					33.30	
41LR187			9.80	22.00					29.30	
41NA27	0.03	0.01	0.60	0.80					6.00	
41CP10									35.20	
41DT80	8.50			47.90				2.80	12.70	
41DT124			5.40	8.90	5.40			3.60	7.10	
41RR48			4.30		4.30				4.30	
41LR60			7.80	2.00					2.00	
41LR39		2.60	13.20	0.90				0.40	14.00	
41RK19	0.30	0.10	26.70	3.50					7.20	
41RK21		0.70	8.90	0.70					6.70	
41RK32	1.70		23.30	3.30					3.30	
41RK36			19.20						7.70	
41RK39			10.30						11.30	
41RK214		0.60	7.50	22.50	0.30	1.80			11.30	
41GG33		2.90	7.20	2.00					6.40	
41GG33			1.30						2.50	
41SY92									19.50	
41AN51		1.90	20.80	8.60	2.30	0.10			16.30	
41CP71	0.50		3.40					0.70	18.70	
41HS74				4.30					22.80	
41BW5			2.20	0.20					52.80	
41LR2	16.50			10.00					24.40	
41RR14	0.80								51.60	
41RR16									13.20	
41RR16	35.30								21.70	
41RR11									31.30	
41RR11	8.30								25.00	
41RR236				13.80					10.30	
41RR248	79.60								5.70	
41RR290									20.00	
41BW3			2.00	0.30	1.00			1.00	43.00	
41TT672			16.10	4.80					14.50	
41NA49		0.60		1.20				0.10	13.40	
41HO50									7.10	
41TT653							1.90		17.30	
41RR16									0.60	
41RR16	23.60								29.80	
41CE19	0.40	0.40	0.40	3.70			0.30		10.00	
41DT16				11.80			5.90		29.40	
41MR2	0.60		5.40			1.60		0.10	37.90	0.10
41UR11		2.40	1.00	0.80				0.20	9.10	
41MR12									32.80	
41MR1	0.10						1.50		7.40	
41UR30		2.00	9.20	8.50	2.00				34.70	
41TT653	0.90		9.40	1.00	0.20	0.10			4.70	0.10
41RK214			15.70	14.90					9.60	
41RK215			16.70	16.70					29.20	
41RK216			13.30		10.00		6.70		6.70	
41NA235	0.50		8.70	1.00		1.00			10.80	
41NA236		0.70	1.40	0.70						
41NA244			7.40	13.20		3.00			23.50	
41NA248			4.80	4.80					26.50	
41NA264			2.10	4.30	2.10				6.40	
41NA285		1.60	8.20	7.40					32.80	
41NA243						2.30			6.80	
41NA247			8.10	5.40					16.20	
41CP257	1.20		13.00	13.00					23.50	
41CP272	2.20		6.50	4.40		1.10			15.20	
41FK107			7.00	54.10		3.80			11.40	
41TT804			4.50	45.40					18.20	
41TT310			3.40	17.20					6.90	
41HS573			2.90	1.80			1.10		12.30	
41HS574		3.30	23.90	1.40					21.00	
41HS843									29.30	
41HS844		0.80	5.00	10.70					20.70	
41HS846	0.60	0.60	8.30	6.00					19.10	
41HS588		0.80	5.80	1.40			0.40		9.70	
41FT425		1.60	8.10	27.00					29.70	
41DT11		0.60	1.30	4.60					35.70	
41NA60	0.10		1.50	0.10	0.10				12.70	
41TT372			8.10	8.80					23.20	
41CE354	1.30								14.50	
41CE354	0.20		0.60						11.60	
41LR11			5.30	26.30					26.30	
41LR31				8.80					14.00	
41MX5	15.60		1.20	3.10					19.10	
41HO91		2.60	5.10						15.40	
41CE461					2.00				10.20	
41NA15		0.20	1.90					0.10	11.40	
41HO263	3.60		9.10	3.60	1.90				7.30	
41NA321			5.80		0.60				13.00	

Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMFWengraved-brushed	DMFWred-slipped	DMFWtrailed	Other decorative method	No. of decorated sherds	Reference	Estimated age
41AN1					68	Perttula et al. 2011b	ca. A.D. 1400-1650
41AN2	4.90				41	Perttula et al. 2011b	ca. A.D. 1400-1650
41AN8					108	Perttula et al. 2011b	ca. A.D. 1400-1720
41AN23					35	Perttula et al. 2011b	ca. A.D. 1400-1650
41AN32					52	Perttula et al. 2011b	ca. A.D. 1400-1650
41CE3					60	Perttula et al. 2011b	ca. A.D. 1400-1650
41CE4					75	Perttula et al. 2011b	ca. A.D. 1400-1650
41CE8					75	Perttula et al. 2011b	ca. A.D. 1400-1650
41AN38	0.10	0.70		0.04 [Lip notched]	2572	Perttula et al. 2011b	ca. A.D. 1400-1480
41LR170					11	Mahoney 2001	ca. A.D. 1000-1200
41LR186					9	Mahoney 2001	ca. A.D. 1000-1200
41LR187		26.80			41	Mahoney 2001	ca. A.D. 1200-1400
41NA27	Trace			0.3 [Grooved]	22619	Fields 1995	ca. A.D. 1680-1750
41CP10					970	Turner and Smith 2002	ca. A.D. 1200-1430
							ca. A.D. 1000-1200,
							A.D. 1500+
41DT80		4.20		2.8 [Painted]	71	McGregor et al. 1996	ca. A.D. 1000-1200
41DT124		1.80			56	McGregor et al. 1996	ca. A.D. 1000-1200
41RR48		13.00			23	Mallouf 1976	ca. A.D. 1000-1200
41LR60		13.70			51	Mallouf 1976	ca. A.D. 1200-1400
				1.7 [Lip notched]; 0.4			
				[Grooved]	235	Mallouf 1976	ca. A.D. 1000-1200
41LR39		14.90		0.1 [Stamped]	1864	Clark and Ivey 1974	ca. A.D. 1200-1400
41RK19		0.50			135	Clark and Ivey 1974	ca. A.D. 1400-1500
41RK21		0.70			60	Clark and Ivey 1974	ca. A.D. 1200-1400
41RK32		1.70			26	Clark and Ivey 1974	ca. A.D. 1680-1730
41RK36					97	Clark and Ivey 1974	ca. A.D. 1200-1400
41RK39					3847	Rogers and Perttula 2004	ca. A.D. 1200-1450
41RK214		0.80	0.03	0.03 [Lip notched]	343	Perttula 2011b	ca. A.D. 900-1200
41GG33				0.6 [Lip notched]	79	Perttula 2011b	ca. A.D. 1500-1680
41GG33					1862	Middlebrook 1994	ca. A.D. 1200-1400
41SY92					688	Perttula et al. 2012d	ca. A.D. 1200-1400
41AN51		11.30			418	Perttula and Nelson 2004a	ca. A.D. 1430-1680
41CP71		6.20	0.50			Heartfield, Price and Greene 1988	ca. A.D. 1200-1450
				0.03 [Lip notched]	417	Gilmore 1986	ca. A.D. 1700-1760
41HS74					455	Krieger 2000	ca. A.D. 1100-1400
41BW5		0.50			126	Prikryl 2008	ca. A.D. 1100-1300,
41LR2		10.00			219	Perttula 2008c	1500-1700
					1094	Perttula 2008c	ca. A.D. 1100-1300
41RR14		25.40			134	Perttula 2008d	ca. A.D. 1100-1300
41RR16		17.40			36	Perttula 2008d	ca. A.D. 1400-1680
41RR16		6.10	1.40	0.3 [Lip notched]	58	Perttula 2008d	ca. A.D. 1300-1500
41RR11		18.70			157	Perttula 2008d	ca. A.D. 1400-1600
41RR11		30.60			10	Perttula 2008d	ca. A.D. 1300-1500
41RR236		58.60			302	Perttula and Nelson 2003b	ca. A.D. 1100-1600
41RR248		4.50			62	Dixon et al. 1995	ca. A.D. 1430-1600
41RR290		30.00	10.00		3431	Hart 1982	ca. A.D. 1200-1450
41BW3		2.30	30.80		85	Jurney 2000	ca. A.D. 1400-1650
41TT672					52	Galan et al. 1997	ca. A.D. 1430-1680
41NA49			1.40		154	Skinner et al. 1969	ca. A.D. 1000-1300
41HO50				1.2 [fabric impressed]	503	Skinner et al. 1969	ca. A.D. 1300-1680
41TT653		3.80			1354	Creel 1979	ca. A.D. 900-1300
41RR16		44.20			17	Jurney et al. 1993	ca. A.D. 1000-1200
41RR16		42.80	0.60		2148	Davis et al. 2010	ca. A.D. 1430-1680
					858	Davis et al. 2010	ca. A.D. 1430-1680
41CE19		0.60		0.1 [painted] 0.1 [grooved]	727	Davis et al. 2010	ca. A.D. 1430-1680
41DT16		5.90			2216	Davis et al. 2010	ca. A.D. 1430-1680
41MR2		7.80			153	Perttula 2011c	ca. A.D. 900-1200
41UR11		3.50	1.40		1641	Perttula and Sherman 2009	ca. A.D. 1430-1680
41MR12		7.80	0.60	1.4 [stamped]	114	Rogers et al. 1994	ca. A.D. 1200-1450
41MR1					24	Rogers et al. 1994	ca. A.D. 1200-1450
41UR30					30	Rogers et al. 1994	ca. A.D. 1200-1450
41TT653		4.60		0.7 [grooved/fluted]	195	Perttula 2002b	ca. A.D. 1400-1650
41RK214					146	Perttula 2002b	ca. A.D. 1400-1650
41RK215					68	Perttula 2002b	ca. A.D. 1200-1400
41RK216					83	Perttula 2002b	ca. A.D. 1200-1400
41NA235		1.00			47	Perttula 2002b	ca. A.D. 1400-1650
41NA236					122	Perttula 2002b	ca. A.D. 900-1300
41NA244				0.8 [Lip notched]	44	Perttula 2002b	ca. A.D. 1400-1650
41NA248					37	Perttula 2002b	ca. A.D. 1200-1400
41NA264					81	Nelson and Perttula 2003b	ca. A.D. 1430-1680
41NA285					92	Nelson and Perttula 2003b	ca. A.D. 1430-1550
41NA243	2.30				157	Nelson and Perttula 2003b	ca. A.D. 1000-1200
41NA247					22	Nelson and Perttula 2003b	ca. A.D. 1200-1400
41CP257		16.00			29	Perttula and Nelson 2002b	ca. A.D. 1430-1680
41CP272		10.90			277	Gadus et al. 2006	ca. A.D. 1430-1680
41FK107		0.60			210	Gadus et al. 2006	ca. A.D. 1200-1450
41TT804		4.50			41	Gadus et al. 2006	ca. A.D. 1430-1680
41TT310					121	Gadus et al. 2006	ca. A.D. 1430-1680
41HS573					168	Gadus et al. 2006	ca. A.D. 1200-1430
41HS574		2.40			780	Dockall et al. 2008	ca. A.D. 1300-1640
41HS843		0.80			185	Gadus et al. 2002	ca. A.D. 1250-1400
41HS844		2.40			154	Fields et al. 1994b	ca. A.D. 900-1300
41HS846				0.10	2132	Perttula et al. 2010c	ca. A.D. 1680-1730
41HS588					297	Barnhardt et al. 1997	ca. A.D. 1200-1430
41FT425					76	Perttula and Nelson 2007a	ca. A.D. 1680-1730
41DT11		7.80			474	Perttula and Nelson 2007a	ca. A.D. 1680-1730
41NA60	0.90		0.10	2.4 [grooved]	19	Lorrain and Hoffrichter 1968	ca. A.D. 1000-1200
41TT372					57	Lorrain and Hoffrichter 1968	ca. A.D. 1200-1400
41CE354					514	Brewington et al. 1995	ca. A.D. 1400-1480
41CE354		0.20			39	Perttula and Nelson 2007b	ca. A.D. 1680-1730
41LR11		10.50			49	Perttula and Nelson 2009	ca. A.D. 1680-1730
41LR31		50.90			1120	Walker and Perttula 2011	ca. A.D. 1680-1730
41MX5		2.10	2.50		55	Perttula et al. 2011c	ca. A.D. 1680-1730
41HO91					154	Perttula et al. 2011c	ca. A.D. 1680-1730
41CE461				2.00			
41NA15				0.4 [grooved]			
41HO263	0.10						
41NA321		0.60		1.3 [grooved]			

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	Tgrog	Tbone	Tshell	Tgrog-bone	Psandy	Reduced	Foxidized	Fine-oxidized	Fred-oxidized	Rfdirect	Rfinverted	Rfeverted	Lfounded	Lfflat	Lfounded-folded	Lfveveled	Pred	Pwhite	DMUWapplied
41NA336	92.40	1.50		4.50	1.50	21.50	12.30	9.20	56.90										0.10
41CS14	89.90	1.20		7.00	1.90														7.00
41SM273, Block I	61.80	12.40		19.10	6.80	21.50	9.70	19.90	49.00	100.00			31.60	68.40					
41SM273, Bl. III	70.20	14.90		11.30	3.60	22.00	14.60	17.40	45.90	94.40	5.60		57.80	35.50	4.40	2.20	0.90		0.30
41SM273, Bl. II	68.70	13.70		13.70	3.90	19.30	12.50	24.80	43.40	96.60	3.40		37.90	55.20	6.90				
41TT396	81.90			14.10	4.00														
41TT400	72.40	4.30		14.30	9.00														1.00
41DT6	53.40	5.40	2.10	38.60						20.00	40.0	40.00	47.60	38.10	9.50				
41DT16	58.40	12.70	1.20	25.00						28.60	21.40	50.00	52.40	23.80					
41TT769	26.30		1.30	72.50		6.80	18.40	17.80	57.00										8.80
41TT13																	11.50		
41BW600	98.50	1.50															6.70		20.00
41HO211	77.40	11.80		9.70	3.20	14.10	13.00	12.00	54.30										
41HO214	74.00	12.30		11.50	2.20	20.70	7.70	13.50	56.30										0.60
41SM272	97.10			2.90															
41CP314																			3.00
41CP317																			2.30
41CP304	95.00			5.00		5.00	26.00	9.00	60.00										0.90
41CP315	89.00			10.00	1.00														
41SM272	76.00	8.00		12.00															
41SM273																			1.20
41SV100	52.20	2.00			45.80														
16SA101	40.10	5.80			54.00														
16SA17	39.00	12.90			48.10														0.70
16SA204	76.20		0.40	23.50															1.10
16SA62																			0.30
16SA30B																			1.00
16SA37B																			0.30
16SA37A																			8.00
16SA30A																			
41TT110																			0.60
41UR1																			3.50
41UR3																			2.00
41UR13																			
41UR14																			
41UR18																			0.70
41WD16																			
41CP8																			1.90
41CP14																			1.00
41FK4																			20.70
41MX6																			
41MX8																			3.90
41TT4																			3.10
41TT6																			4.30
41TT17																			0.80
41TT28																			1.50
41TT52																			
41CP15																			2.60
41HS1																			16.70
41HS10																			
41HS11																			0.90
41MR6																			
41MR13																			7.30
41MR31																			
41MX22																			14.30
41TT18																			7.00
41TT151																			3.40
41UR15																			
41CP3			1.30																
41CP71																			1.10
41CP55	97.80	2.20																	6.20
41LR2	85.50	8.60	5.90																5.60
41GG5	91.80	8.20																	
41GG50	89.40	10.60																	
41BW3, VP 1	85.70	1.40	2.40	10.00		19.20	15.10	15.50	46.40										11.80
41BW4	97.20	2.80															0.40	3.70	6.00
41RK19	88.70	11.30															0.10		0.50
																	0.70		
41BW2	84.90	9.40	5.70							72.90	7.40	19.70	77.70	1.60	20.70		1.50		6.40
41TT12	76.40	23.60																	2.00
41TT11	72.70	27.30																	0.60
41NA317	78.00	4.20		16.40	1.40	2.80	8.30	20.80	68.00										
41CE299	79.90	4.20		9.20	6.80	27.20	16.70	10.30	46.00										
41SM404	92.00	8.00				9.30	15.80	16.30	58.60	93.10	4.30	2.60	74.10	16.40	6.00		0.90	0.90	0.60
41RK240	72.10			16.50	12.60														1.10
41RK242	76.80	0.70		14.70	7.70														
41RK243	74.60			10.40	13.60					88.00		12.00	79.00	21.00					
41UR106																			0.80
41UR106B																			
41UR109																			0.90
41UR118																			0.20
41UR129																			
41UR133, Saddle																			1.90
41LR297	62.50	14.80		21.60		23.50	12.30	8.00	56.20										
41SY323	11.90	69.50		18.60		13.60	5.10	15.30	64.40										1.10
41RK557	42.90	31.80		24.30	1.10														
41HS269																			
41PN175	31.70	53.70		14.00	0.50	18.20	10.90	9.00	61.90	85.80	1.10	12.90	86.00	5.20	8.70				0.10
41HS12	58.10	8.70		31.70	1.50	14.70	8.10	18.50	52.40	91.70	8.30		74.50	23.00	2.50				
41CP408	40.60	4.40	0.20	54.20	0.50	25.20	13.40	19.90	41.10	92.20		7.80	66.30	15.70	16.80		1.10		1.90
41AN21	94.30	0.80	4.10			12.70	30.90	40.00	16.40	37.50	18.80	43.80	83.30	16.70					
41CE39	94.60			4.30	1.10	11.40	22.90	14.90	50.90										1.60
41NA321																			
41CE20	85.70	1.60		12.70		13.70	17.60	24.40	44.40										
41CE48	69.90	9.70		19.70	0.80	15.20	18.50	9.80	56.50	50.00	16.70	33.30	88.90		11.10			0.50	
41CE293	93.60	1.10		4.50	0.70	10.60	18.90	15.60	54.70	44.40	5.60	50.00	76.90	7.70	15.40				



Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMUWapplied-brushed	DMUWapplied-incised	DMUWapplied-punctated	DMUWbrushed	DMUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-appliqued	DMUWincised	DMUWincised-punctated
41NA336				89.20	1.00	1.00		3.00	0.10
41CS14				34.20	8.40			10.90	1.00
41SM273, Block I				10.50	2.10	2.10		31.60	5.30
41SM273, Bl. III				4.40	0.90			12.60	4.10
41SM273, Bl. II				6.10	1.20	1.20		28.20	8.00
41TT396				19.60	2.20			39.10	
41TT400				23.50				31.60	1.00
41DT6		4.70						28.10	3.10
41DT16				5.80				16.50	11.60
41TT769				9.90		2.20	1.10	9.90	6.60
41TT13				7.70				11.50	
41BW600								20.00	
41HQ211				41.40	27.10	2.90		11.40	1.40
41HQ214	1.70			58.70	14.00	2.30		7.00	
41SM272				76.20					4.80
41CP314				33.30	3.00	3.00			
41CP317		1.50	0.80	31.80	5.40	4.70	3.10	8.50	3.10
41CP304			1.80	40.20	9.80	4.50		4.50	1.80
41CP315				50.00	3.30	13.30		3.30	
41SM272				74.10	11.10			3.70	
41SM273				9.30	2.30		1.20	18.60	12.80
41SY100				3.70				63.00	3.70
16SA101				1.30				71.30	11.10
16SA17				15.70				53.20	12.30
16SA204				36.70	2.10			10.50	0.30
16SA62	0.04	0.10		31.60	0.02	0.10		6.60	0.40
16SA30B				27.60				31.10	
16SA37B				24.90	1.50			38.70	4.60
16SA37A				46.70				17.80	
16SA30A				3.00				39.70	
41TT110				26.90		0.50	0.30	20.30	2.80
41UR1				36.70				11.10	1.00
41UR3				63.40	4.40	2.30		9.40	
41UR13				82.00	6.60			4.10	
41UR14				72.80	5.40	4.70		4.10	0.90
41UR18		0.10		67.20	5.10	3.60		4.40	
41WD16			1.40	17.20	0.70	0.70	0.70	18.60	2.80
41CP8		0.10		42.00	1.30	1.50		19.40	1.50
41CP14				12.00	0.60			39.10	
41FK4			2.40	7.30			1.80	10.40	
41MX6				53.80		1.10		6.60	
41MX8				50.00	1.30	6.60		8.60	1.30
41TT4			0.80	35.70	3.90	2.30	0.80	7.00	0.80
41TT6				13.90			1.10	10.60	
41TT17				28.80		1.50	0.80	22.00	1.50
41TT28				18.90				30.00	
41TT52				29.50	1.70	5.20	1.70	28.90	0.60
41CP15				17.90	2.60			33.30	
41HS1				57.40				9.30	1.90
41HS10				71.70	3.80			5.70	
41HS11				66.00	6.30	3.60	6.70	3.00	
41MR6				46.30	3.00			26.90	
41MR13				68.30				4.90	
41MR31				50.00				21.70	
41MX22				32.70	2.00			18.40	2.00
41TT18				60.50	4.70			2.30	
41TT151				15.50				48.30	
41UR15				74.10	5.20	1.70		6.90	
41CP3				43.60	1.10	1.10	2.10	3.20	2.10
41CP71		0.50		48.60	4.80	2.30	1.40	12.00	1.40
41CP55				53.80	9.20			6.20	
41LR2								16.70	5.60
41GG5				26.00		2.00		8.00	
41GG50				38.10		9.50		9.50	
41BW3, VP 1	0.60			7.80	1.50			15.40	1.20
41BW4	0.70	0.40	1.10	3.00	1.90	1.90		19.00	12.70
41RK19		0.05		36.60	3.80	1.90	0.60	17.10	10.60
41BW2		1.20	0.10	8.60	0.20	0.60	1.30	14.70	0.70
41TT12		0.30		1.10	0.30			32.10	4.30
41TT11		0.60	0.20	10.80	1.80	0.40	0.20	30.50	8.80
41NA317				70.00	8.00	6.00		2.00	
41CE299				51.90	1.90		0.60	14.90	3.20
41SM404				10.70	3.10	2.00		38.70	4.90
41RK240				30.50	0.50	11.80	0.50	4.80	10.20
41RK242				12.80		2.60	9.00	3.80	15.40
41RK243			0.40	10.40	3.20	0.40		15.00	6.80
41UR106				58.90	2.90			11.60	0.50
41UR106B		0.50		42.50	1.10	1.10		13.70	3.30
41UR109		0.30	0.30	45.70	0.90	3.00	0.90	13.10	1.50
41UR118			0.40	59.60	0.20	0.40	0.40	7.10	0.20
41UR129				63.10		2.40	0.30	4.10	2.40
41UR133, Saddle				1.00	1.90			31.70	20.50
41LR297								45.40	9.10
41SY323				64.80	2.30			14.80	3.40
41RK557				49.10		1.20	1.20	28.90	
41HS269				64.30				9.50	
41PN175		0.40		59.10	5.60	0.60	0.30	18.10	1.10
41HS12								67.00	13.40
41CP408		0.30		18.40	3.00	1.00	0.10	23.50	5.40
41AN21		0.70		72.80		1.40	1.40	2.70	0.70
41CE39				65.30	1.60			9.70	2.40
41NA321				78.60	2.10			3.40	
41CE20				70.90	4.40	5.50	1.60	1.70	1.10
41CE48				74.70	0.50	1.00		9.30	
41CE293				81.50	1.90	1.30		0.60	1.00



Table 1. East Texas Caddo ceramic sherd database, cont.

Trinomial	DMFWengraved-brushed	DMFWred-slipped	DMFWtrailed	Other decorative method	No. of decorated sherds	Reference	Estimated age
41NA336					198	Perttula et al. 2011c	ca. A.D. 1680-1730
41CS14		2.00			202	Perttula 1998	ca. A.D. 1200-1400
41SM273, Block I		4.20			95	Perttula and Nelson 2004b	ca. A.D. 900-1200
41SM273, Bl. III		0.60	0.30		342	Perttula and Nelson 2004b	ca. A.D. 900-1200
41SM273, Bl. II		1.20			163	Perttula and Nelson 2004b	ca. A.D. 900-1200
41TT396		6.50			46	Nash et al. 1995	ca. A.D. 1430-1680
41TT400		8.20		1.0 [stamped]	98	Nash et al. 1995	ca. A.D. 1200-1430
41DT6		14.10			64	Fields et al. 1993	ca. A.D. 1000-1200
41DT16		13.60			103	Fields et al. 1993	ca. A.D. 1000-1200
41TT769		18.70			91	Walters et al. 2003	ca. A.D. 1200-1450
41TT13		1.90			52	Bell 1981	ca. A.D. 1430-1680
41BW600					15	Cliff et al. 1997	ca. A.D. 1200-1400
41HO211					70	Perttula and Nelson 2006b	Ca. A.D. 1680-1730
41HO214					172	Perttula and Nelson 2006b	Ca. A.D. 1680-1730
41SM272					21	Perttula and Nelson 2000a	ca. A.D. 1400-1650
41CP314		12.10			33	Perttula and Nelson 1999	ca. A.D. 1430-1680
41CP317		6.20			129	Perttula and Nelson 1999	ca. A.D. 1430-1680
41CP304		8.00			112	Perttula and Nelson 1998	ca. A.D. 1430-1680
41CP315		6.70			30	Perttula and Nelson 1998	ca. A.D. 1430-1680
41SM272		3.70			27	Perttula and Nelson 2001	ca. A.D. 1400-1650
41SM273		3.50			86	Perttula and Nelson 2001	ca. A.D. 900-1200
41SY100					27	Benham et al. 1973	ca. A.D. 1000-1200
16SA101					296	Benham et al. 1973	ca. A.D. 1000-1200
16SA17					2298	Benham et al. 1973	ca. A.D. 1400-1680
16SA204				1.50	1498	Kelley 2006	ca. A.D. 1500-1600
16SA62				0.02 [lip notched]	4871	Woodall 1969	ca. A.D. 1400-1680
16SA308					1263	Woodall 1969	ca. A.D. 1400-1680
16SA37B				0.20	1210	McClurkan et al. 1966	ca. A.D. 1400-1680
16SA37A				0.1 [stamped]	451	McClurkan et al. 1966	ca. A.D. 1400-1680
16SA30A					131	McClurkan et al. 1966	ca. A.D. 1000-1200
41TT110		29.50			6361	Thurmond 1990	ca. A.D. 1200-1400
41UR1		9.00			199	Thurmond 1990	ca. A.D. 1430-1680
41UR3		0.70	0.30		298	Thurmond 1990	ca. A.D. 1430-1680
41UR13					122	Thurmond 1990	ca. A.D. 1430-1680
41UR14		1.70			706	Thurmond 1990	ca. A.D. 1430-1680
41UR18		3.00			722	Thurmond 1990	ca. A.D. 1430-1680
41WD16		4.10			145	Thurmond 1990	ca. A.D. 1430-1680
41CP8		2.20			1565	Thurmond 1990	ca. A.D. 1430-1680
41CP14					624	Thurmond 1990	ca. A.D. 1200-1430
41FK4		4.30			164	Thurmond 1990	ca. A.D. 1430-1680
41MX6		3.30			91	Thurmond 1990	ca. A.D. 1200-1430
41MX8		1.30	1.30		152	Thurmond 1990	ca. A.D. 1430-1680
41TT4		3.10			129	Thurmond 1990	ca. A.D. 1430-1680
41TT6		4.30			94	Thurmond 1990	ca. A.D. 1200-1430
41TT17		6.10	0.80		132	Thurmond 1990	ca. A.D. 1430-1680
41TT28					915	Thurmond 1990	ca. A.D. 1430-1680
41TT52		7.50			173	Thurmond 1990	ca. A.D. 1200-1430
41CP15		28.20			39	Thurmond 1990	ca. A.D. 1200-1430
41HS1		1.90			54	Thurmond 1990	ca. A.D. 1430-1680
41HS10					53	Thurmond 1990	ca. A.D. 1430-1680
41HS11			0.60		332	Thurmond 1990	ca. A.D. 1430-1680
41MR6		1.50			67	Thurmond 1990	ca. A.D. 1430-1680
41MR13					41	Thurmond 1990	ca. A.D. 1430-1680
41MR31		2.20			46	Thurmond 1990	ca. A.D. 1430-1680
41MX22		2.00			49	Thurmond 1990	ca. A.D. 1430-1680
41TT18		9.30			43	Thurmond 1990	ca. A.D. 1430-1680
41TT151					58	Thurmond 1990	ca. A.D. 1200-1430
41UR15					58	Thurmond 1990	ca. A.D. 1430-1680
41CP3		4.30			94	Thurmond 1990	ca. A.D. 1430-1680
41CP71		4.70	0.20		2591	Perttula 2014a	ca. A.D. 1430-1680
41CP55					65	Perttula and Nelson 2014	ca. A.D. 1430-1680
41LR2		22.20			18	Perttula et al. 2014b	ca. A.D. 1100-1300, 1680-1730
41GG5					50	Perttula and Nelson 2013	ca. A.D. 1200-1400
41GG50					42	Perttula and Nelson 2013	ca. A.D. 1200-1430
41BW3, VP 1		4.80	19.90		332	Perttula 2014b	ca. A.D. 1100-1600
41BW4		3.40	6.00		268	Perttula 2014c	ca. A.D. 1200-1500
41RK19		0.10		0.05 [stamped]	2096	Perttula 2014d	ca. A.D. 1200-1430
41BW2		2.00	1.00	0.1 [lip notched]; 0.2 [rough]	1223	Perttula 2014e	ca. A.D. 1500-1700
41TT12		3.10			352	Perttula 2014f	ca. A.D. 900-1200
41TT11		11.20			509	Perttula 2014f	ca. A.D. 1200-1430
41NA317					50	Perttula 2013h	ca. A.D. 1680-1730
41CE299					154	Perttula and Nelson 2000b	ca. A.D. 1400-1650
41SM404		6.50			448	Nash et al. 2012	ca. A.D. 1200-1400
41RK240					187	Sherman 2001	ca. A.D. 1200-1400
41RK242		1.30			78	Sherman 2001	ca. A.D. 1200-1400
41RK243					280	Sherman 2001	ca. A.D. 1200-1400
41UR106		6.30			380	Parsons 2011	ca. A.D. 1430-1680
41UR106B		1.60		0.5 [painted]	183	Parsons 2011	ca. A.D. 1430-1680
41UR109		0.30		0.3 [painted]	328	Parsons 2011	ca. A.D. 1430-1680
41UR118					1120	Parsons 2011	ca. A.D. 1430-1680
41UR129		2.00			295	Parsons 2011	ca. A.D. 1430-1680
41UR133, Saddle					161	Parsons 2011	ca. A.D. 1200-1430
41LR297					88	Perttula 2009g	ca. A.D. 900-1200
41SY323		2.30			88	Perttula 2010c	ca. A.D. 1500-1680
41RK557					163	Dockall and Fields 2011	ca. A.D. 1300-1600
41HS269					42	Griffith et al. 2012	ca. A.D. 1430-1680
41PN175		0.20		0.1 [lip notched]	1798	Perttula 2014g	ca. A.D. 1300-1500
41HS12		1.40			558	Goode et al. 2014	ca. A.D. 900-1200
41CP408	0.10	5.40		0.3 [Lip notched]	729	Perttula and Ellis 2012	ca. A.D. 1200-1450
41AN21		1.40			147	Marceaux 2011	ca. A.D. 1680-1730
41CE39					124	Marceaux 2011	Ca. A.D. 1680-1730
41NA321					89	Marceaux 2011	ca. A.D. 1680-1730
41CE20					182	Marceaux 2011	ca. A.D. 1680-1730
41CE48					194	Marceaux 2011	ca. A.D. 1680-1730
41CE293				6.9 [Grooved]	519	Marceaux 2011	ca. A.D. 1680-1730

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	Tgrog	Tbone	Tshell	Tgrog-bone	Psandy	Freduced	Foxidized	Finc-oxidized	Fred-oxidized	Rfdirect	Rfinverted	Rfeverted	Lfrouded	Lfflat	Lfrouded-folded	Lfbeveled	Pred	Pwhite	DMUWapplied
41AG22	92.00	1.60		6.40		9.40	9.40	18.80	61.90	66.70		33.30	92.90	7.10			1.20	0.60	
41CE62	71.20	4.50		24.20		5.70	26.20	13.90	54.20										
41NA6	85.10	6.60		7.70	0.50	12.60	13.70	17.10	56.60	71.40	14.30	14.30	66.70	22.20	11.10			0.30	
41NA15	79.20	7.00		13.90		16.70	7.60	19.70	56.10	69.20		30.80	64.30	21.40	14.30		0.50	0.50	
41NA44	64.20	21.70		10.70	3.30	21.40	20.30	10.90	47.30	62.50	1.60	35.90	71.60	13.60	14.80			0.70	
41NA54	73.50	10.80		15.70		13.10	4.80	15.50	66.70										
41NA21	27.60	42.80	0.40	28.80	0.50	22.60	12.20	13.90	51.20	52.20	8.70	39.10	80.00	14.50	5.70		0.50	0.10	
41NA22	57.20	20.60		20.60	1.60	10.30	16.60	9.20	63.90	78.10		21.90	83.30	7.30	9.10		0.10	0.10	
41NA23	84.50	5.50		9.50	0.30	11.50	22.90	16.70	48.90	73.50		26.50	64.40	17.80	17.80			0.30	
41NA111	59.60	22.20		18.20		9.10	11.10	17.20	62.60									0.50	
41NA183	64.30	13.20	1.00	21.40		24.00	12.50	5.20	58.30									0.40	
41NA206	56.40	31.50	0.80	10.20	1.00	34.10	22.00	8.30	35.80	77.50		22.50	67.50	6.10	26.50		0.02	0.20	
41NA67	75.50	6.30		18.10		29.70	6.30	10.90	53.10	62.50		37.50	85.70	2.40	11.90				
41SA94	58.50	18.10	0.70	22.90		13.60	7.80	9.60	68.90	88.90	3.00	8.10	53.30	20.00	26.70			0.20	
41SA25	1.30	75.20	12.90	5.50	5.40					68.80	3.10	28.10	73.00	8.10	18.90				
41BW3, Mound																			9.90
41SA25	1.70	79.20	10.80	8.60	0.10				18.90	11.70		69.40							
41WD577	76.20	1.00		18.60	4.10				89.50			10.50	38.50	42.30	19.20			2.00	
41SY43	51.50	48.40																0.20	
41SY279	24.00	76.00																1.10	
41SY280	18.30	81.70																1.50	
41LR2	72.40	11.70	15.90															5.40	
41SY41	69.80	30.20																1.60	
41SY45	53.70	46.30																	
41SY27	17.00	83.00																4.50	
41LR2, NMNH	68.00	13.40	18.60															5.20	
41GG69	84.40	15.60																0.40	
41FN1	49.30	10.30	40.40																
41LR1	71.40	10.00	18.50															3.10	
41WD3	99.40	0.60																11.70	
41TT851	64.00	10.30		25.50														2.40	
41TT852	45.30	8.30		46.40														3.00	
41TT853	65.30	1.90		32.80														0.60	
41WD6	95.20	4.80																15.80	
41WD1	96.90	3.10																4.80	

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	DMUWapplied-brushed	DMUWapplied-incised	DMUWapplied-punctated	DMUWbrushed	DMUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-appliqued	DMUWincised	DMUWincised-punctated
41AG22				87.70	0.60	1.80	0.60	1.20	1.20
41CE62				90.50				5.40	
41NA6				78.80	1.60	2.10	0.70	4.30	0.30
41NA15				60.50	2.20	3.20	1.60	2.70	0.50
41NA44	1.40			55.70	5.80	5.10		7.20	1.90
41NA54	1.10			72.00	8.50	3.20		5.80	0.50
41NA21				68.90	0.30	0.40		6.90	0.20
41NA22	3.80	0.03		77.40	1.60	3.60		3.40	0.10
41NA23	0.80			76.90	1.00	1.90		6.30	0.70
41NA111	1.90			79.70	1.90	2.30		1.40	
41NA183				58.00	1.70	1.30		10.90	3.40
41NA206	0.50			52.60	2.80	0.60		12.30	1.40
41NA67				16.20		1.00		24.80	10.00
41SA94	0.60			46.00	1.00	2.60		12.60	5.00
41SA25			0.10	0.60	0.10			35.60	0.80
41BW3, Mound				12.40				36.60	
41SA25								29.10	3.40
41WD577				5.00	1.00	2.00		21.80	6.00
41SY43			0.10	66.30	3.00	1.80		9.00	0.60
41SY279			1.10	52.80			1.00	20.90	1.10
41SY280				55.70	6.30	0.40		17.30	0.30
41LR2				1.20				15.00	
41SY41				45.20	3.20	6.50		9.00	9.50
41SY45				62.70	5.90	4.90		8.60	3.20
41SY27				87.20		0.80	0.80	1.70	
41LR2, NMNH				0.40	0.40			10.90	1.50
41GG69		0.20		13.30	3.50	1.80		24.40	21.90
41FN1				3.60				28.60	
41LR1		0.30		3.90	0.60	0.30		31.90	1.40
41WD3				21.10	8.80		4.10	2.90	
41TT851				11.50		0.50	0.20	18.10	2.70
41TT852		0.30		32.60		1.50	0.70	17.70	2.50
41TT853		0.10		43.20		2.70	2.50	15.00	4.60
41WD6				1.40	3.40	0.50		12.50	1.00
41WD1				1.00	5.80			43.30	1.00

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	DMUWneck banded	DMUWpinched	DMUWtoot punctated	DMUWfingernail punctated	DMUWcircular punctated	DMUWcane punctated	DMUWridged	DMFeng.-punct.	DMFWengraved	DMFWengraved-appliqued
41AG22									4.30	
41CE62									3.40	
41NA6		1.50							7.70	
41NA15	0.50	0.50							23.20	
41NA44	0.10	1.10						0.10	12.00	
41NA54		1.10							5.80	
41NA21	0.20								10.50	
41NA22		0.30							6.40	
41NA23	0.70	0.20							8.00	
41NA111	0.50	0.50							6.90	
41NA183								0.40	8.40	
41NA206	0.10	0.40							22.30	
41NA67			21.50	2.40					23.80	
41SA94		0.30							24.90	
41SA25									59.30	
41BW3, Mound	2.00								8.10	
41SA25			2.00	0.50	0.20				64.80	
41WD577			6.90	8.90	6.90				20.00	
41SY43			3.40	0.10			0.30	0.30	13.50	
41SY279			4.40				4.40		9.90	
41SY280			2.80	0.10			6.80	0.10	5.00	
41LR2	3.00		3.00	4.20	1.20	0.60			51.50	
41SY41			5.30	2.10	1.10				16.00	
41SY45			4.90	0.50					9.30	
41SY27							0.80		4.10	
41LR2, NMNH	7.90	0.40	2.20	9.00	1.10	0.40			36.90	
41GG69		0.50	12.30	1.60	3.00	0.20	0.20		16.10	0.20
41FN1			3.60	1.80					8.90	
41LR1	0.90	0.30	6.80	5.90					33.30	
41WD3	12.30		0.60	2.90					30.40	
41TT851	0.50	5.60	16.40	17.90					23.30	
41TT852	0.30	1.20	11.80	5.90					21.90	
41TT853	0.50	2.70	6.20	4.60					17.10	
41WD6	30.30		3.80	0.50					25.00	
41WD1		1.00	5.80	3.90	1.00				14.40	

**Table 1. East Texas Caddo ceramic sherd database, cont.**

Trinomial	DMFWengraved-brushed	DMFWred-slipped	DMFWtrailed	Other decorative method	No. of decorated sherds	Reference	Estimated age
41AG22					163	Marceaux 2011	ca. A.D. 1680-1730
41CE62					148	Marceaux 2011	Ca. A.D. 1680-1730
41NA6	0.70			0.1 [Grooved]	673	Marceaux 2011	Ca. A.D. 1680-1730
41NA15	1.60			1.6 [Grooved]	185	Marceaux 2011	Ca. A.D. 1680-1730
41NA44	0.30			0.8 [Grooved]	1812	Marceaux 2011	Ca. A.D. 1680-1730
41NA54					189	Marceaux 2011	Ca. A.D. 1680-1730
41NA21	0.10			0.03 [Lip notched]	9819	Marceaux 2011	ca. A.D. 1680-1730
41NA22	0.10			0.4 [grooved]; 0.2 [lip notch]	2874	Marceaux 2011	Ca. A.D. 1680-1730
41NA23	0.10			0.6 [grooved]	2301	Marceaux 2011	Ca. A.D. 1680-1730
41NA111				0.5 [grooved]	217	Marceaux 2011	Ca. A.D. 1680-1730
41NA183	0.40				238	Marceaux 2011	Ca. A.D. 1680-1730
41NA206	0.02			0.4 [grooved]; 0.1 [lip notch]	4156	Marceaux 2011	Ca. A.D. 1680-1730
41NA67				0.02	210	Marceaux 2011	Ca. A.D. 1680-1730
41SA94				0.50	1195	Marceaux 2011	ca. A.D. 1500-1700
41SA25				0.1 [lip notched]	1940	Marceaux 2011	ca. A.D. 1720-1770
41BW3, Mound		8.10	7.30	6.3 [roughened]	6198	Perttula 2014b	ca. A.D. 1400-1690
41SA25					441	Corbin et al. 1990	ca. A.D. 1720-1770
41WD577		18.90			101	Perttula and Gilmore 1988	ca. A.D. 1200-1430
41SY43				0.30	873	Selden and Perttula 2014	ca. A.D. 1400-1600
41SY279				1.10	91	Selden and Perttula 2014	ca. A.D. 1500-1600
41SY280				0.1 [Impressed]; 0.1 [Stamped]	753	Selden and Perttula 2014	ca. A.D. 1500-1600
41LR2		14.40		0.60	167	Perttula et al. 2015	ca. A.D. 1100-1700
41SY41				0.5 [grooved]	188	Perttula 2014h	ca. A.D. 1400-1500
41SY45					185	Perttula 2014i	ca. A.D. 1400-1500
41SY27					258	Perttula and Selden 2014	ca. A.D. 1450-1550
41LR2, NMNH		17.60	4.10	1.1 [lip notched]; 0.7, CCI	266	Perttula et al. 2015	ca. A.D. 1100-1300, 1600-1740
41GG69		0.50			570	Perttula 2015a	ca. A.D. 1300-1400
41FN1		51.80	1.80		56	Perttula 2015b	ca. A.D. 1100-1300, 1680-1730
41LR1		10.20	0.30	0.3 [lip notched]	354	Perttula 2015c	ca. A.D. 1100-1300, 1680-1740
41WD3		5.30			171	Perttula 2015d	ca. A.D. 1430-1680
41TT851					408	Fields et al. 2014	ca. A.D. 1250-1325
41TT852					745	Fields et al. 2014	ca. A.D. 1425-1500
41TT853				0.1 [lip notched]	787	Fields et al. 2014	ca. A.D. 1400-1500
41WD6		3.40		1.0 [lip notched]; 1.4 [grooved]	208	Perttula 2015e	ca. A.D. 1430-1600
41WD1		17.30		1.0 [lip notched]	104	Perttula 2015f	ca. A.D. 1200-1400

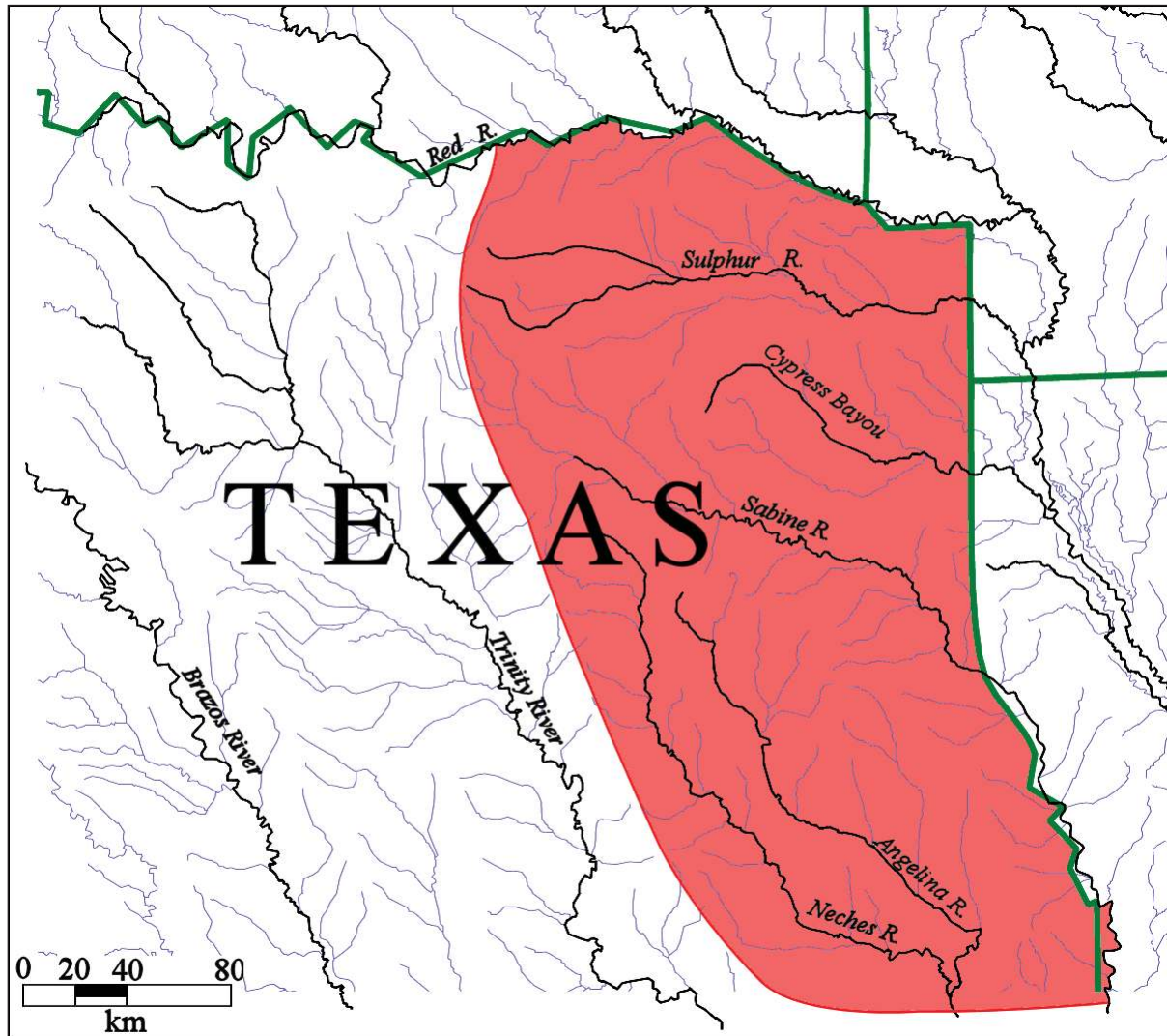


Figure 1. East Texas Caddo area.

circular punctated, cane punctated, and ridged) and fine wares (engraved, engraved-punctated, engraved-appliqued, engraved-brushed, red-slipped, and trailed), as well as other decorative methods (grooved, lip notched, corn cob impressed [CCI], cord impressed, fabric impressed, roughened, trailed-incised, painted, stamped); (g) number of decorated sherds; (h) reference; and (i) estimated age of the site and/or component assemblages, as best as can be determined from published analyses and reported calibrated radiocarbon dates. The focus on methods of decoration in the assemblages is in recognition of the fact that their differences across sites and assemblages provide an indication of regional variation in ceramic assemblages, and the broad categories of decoration “are less subject to inter-observer variation in classification than finer type designations” (Peeples and Roberts 2013:3003).

### INITIAL INTERPRETATIONS

In this section, I review several interpretive findings from the ceramic sherd database regarding East Texas Caddo ceramics. These findings have barely plumbed the depths of the ceramic sherd database, but constitute a beginning effort at the identification of similarities in Caddo ceramic assemblages that likely have a basis in regional patterns of interaction within social networks (e.g., Mills et al. 2013) between differ-



ent Caddo communities. That is to say, the residents of different settlements of Caddo peoples with similar ceramic assemblages (however measured) were most likely to have interacted more frequently with each other than they did with other Caddo settlements with quite different and dissimilar ceramic assemblages.

### Proportion of Engraved Fine wares

Engraved fine ware sherds are ubiquitous in East Texas Caddo ceramic assemblages for a millennium, from ca. A.D. 850 to A.D. 1838. However, there are significant temporal and spatial differences in the relative proportions of engraved sherds in decorated sherd assemblages. Sites where engraved sherds comprise more than 40 percent of decorated sherd assemblages are found in the Red, Big Cypress, upper and middle Sabine, the upper Neches, and the lower Angelina River basin (Figure 2). These are both habitation and mound sites, although all the mound sites with high proportions of engraved sherds are located in the Red River basin: these include Eli Moores (41BW2), Hatchel (41BW3/41BW169), Fasken (41RR14), and Sanders (41LR2) (see Table 1).

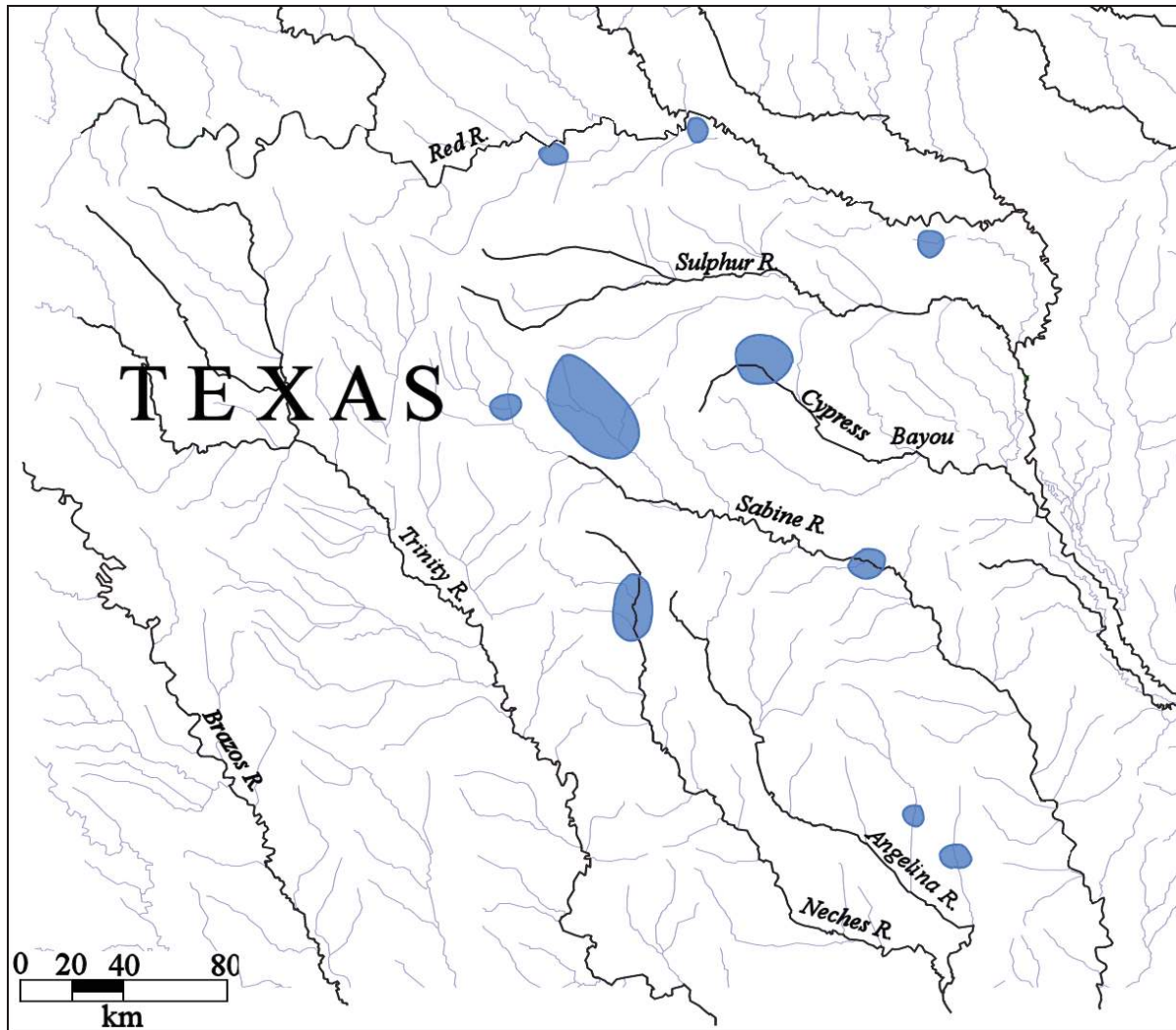


Figure 2. Areas with high proportions (>40 percent of the decorated sherd assemblages) of engraved sherds in East Texas Caddo sites.

Pre-A.D. 1400 sites (n=8) with considerable amounts of engraved sherds in decorated sherd assemblages are present in the upper and middle Sabine, Big Cypress, and the middle reaches of the Red River (see Figure 2). Sites where engraved sherds comprise more than 40 percent of the decorated sherd assemblages are much more common (n=27) in ca. A.D. 1400-1830 Caddo sites throughout East Texas, particularly in Titus phase sites in the upper Sabine River and Big Cypress Creek basins, Frankston phase sites in the upper Neches, and Historic Caddo sites in the upper and middle Sabine, Angelina, and Red River basins (see Table 1).

### Use of Red-Slipped Ceramics

Red-slipped fine wares (bowls, carinated bowls, and an occasional bottle) are a common part of ancestral Caddo ceramic assemblages in several parts of East Texas, most notably in sites in the middle Red River, the Big Cypress Creek basin, the upper Sulphur and Sabine River basins, and the middle Sabine River basin (Figure 3). The virtual absence of red-slipped sherds in ceramic assemblages from the Neches and Angelina River basins is particularly notable.

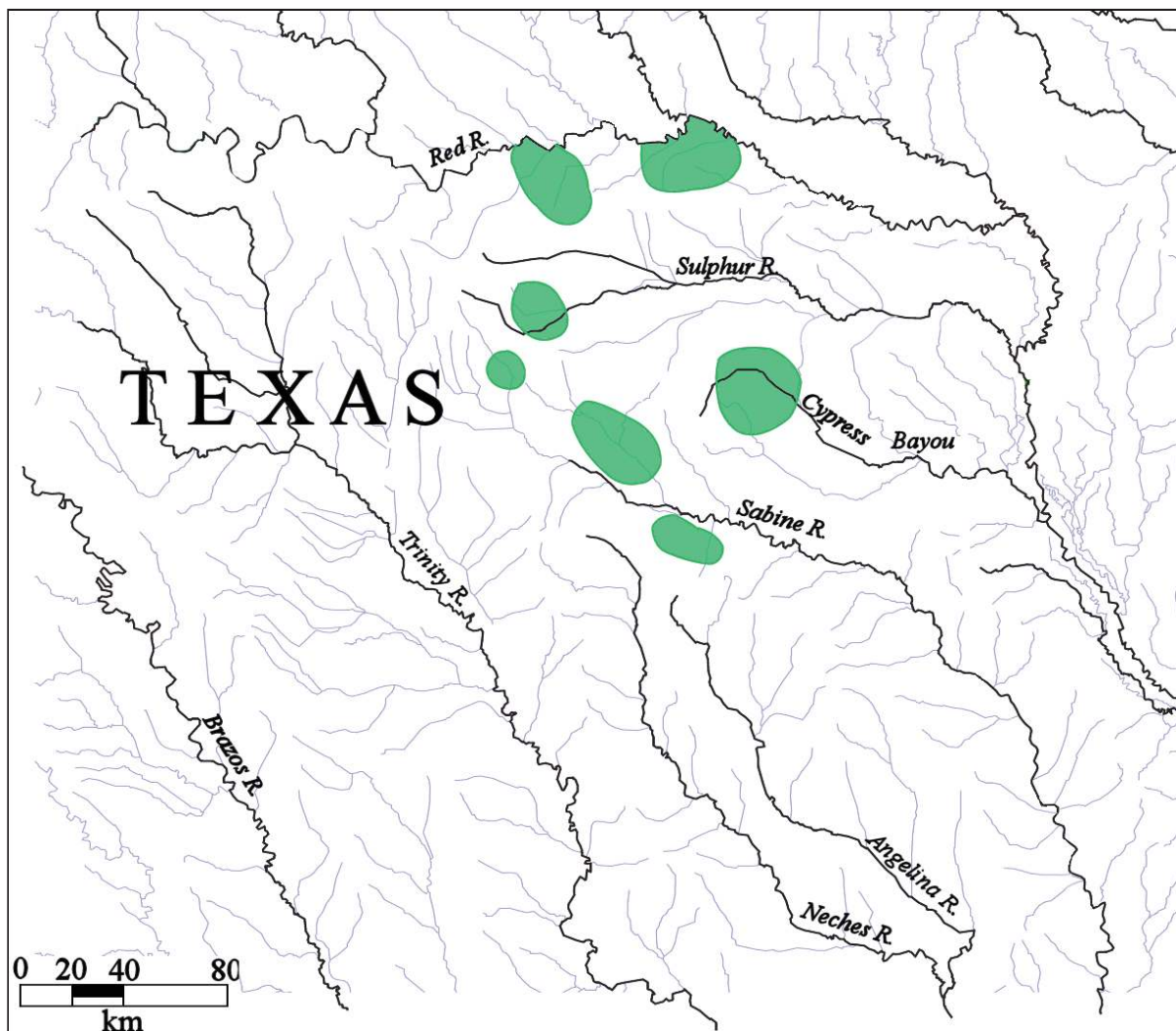


Figure 3. Caddo site clusters with high proportions (>10 percent of decorated ceramic assemblages) of red-slipped sherds in East Texas.



Pre-A.D. 1400 ceramic assemblages where red-slipped sherds are relatively abundant are well represented in the aforementioned areas, particularly at sites such as Jamestown (41SM54), A. C. Gibson (41WD1), Sam Kaufman (41RR16), A. C. Mackin (41LR31), Harling (41FN1), and Sanders (41LR2) on the Sabine and Red rivers, respectively, several sites in the upper Sulphur River basin (41DT54 and 41DT63), and 41TT110 on Big Cypress Creek (see Table 1).

Later ceramic assemblages (i.e., dating after A.D. 1400) with red-slipped sherds are found in these same areas, most notably in shell-tempered wares (Clement Redware, see Flynn 1976) in McCurtain phase sites on the middle reaches of the Red River (see Figure 3) and the ca. A.D. 1680-1740 components at the Harling (41FN1) and Sanders sites. Other Late Caddo sites where red-slipped sherds are common in assemblages include Titus phase sites in the Big Cypress and upper Sabine River basins and 41HP175 in the upper Sulphur River basin (see Table 1).

### **Trailed wares**

Sherds with trailed decorative elements, likely from Keno Trailed bowls and bottles (see Suhm and Jelks 1962), are found in percentages greater than 2 percent in ceramic assemblages in only a few parts of East Texas, principally in sites on the Red River (Figure 4). These sites generally date between ca. A.D. 1400 (or later) and A.D. 1730. The highest proportion of trailed sherds in ceramic assemblages (7.3-30.8 percent) are found in various Texarkana phase village and mound areas at the Hatchel site (41BW3) on the Red River (Perttula 2014b).

### **Use of Brushed Ceramics**

Sherds from brushed utility ware vessels, particularly jars, are a distinctive characteristic of both Middle, Late, and Historic 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 90 percent of all the decorated sherds in some post-A.D. 1400 East Texas ceramic assemblages.

In the East Texas Caddo ceramic sherd database, only a few ca. A.D. 1200-1430 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 (see Table 1). 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 (Figure 5). Caddo ceramic assemblages without considerable amounts of brushed sherds occur in the upper Sabine, Sulphur, and Red River basins.

Historic Caddo sites with high proportions of brushed sherds in ceramic assemblages are found principally in four parts of East Texas (see Figure 5). The first is in Allen phase sites (n=15) in the upper Neches River basin (there is also one mid-Neches River basin Historic Caddo site, 41HO91, with abundant brushed sherds), A.D. 1700-1730 Nasoni Caddo sites (n=3) in the western part of the Angelina River basin (Perttula et al. 2009), and other Allen phase sites/assemblages (n=18) in the central part of the Angelina River basin. One Historic Caddo Kinsloe phase site in the middle Sabine (41RK36) also has high proportions of brushed sherds in its decorated sherd assemblage (see Table 1).

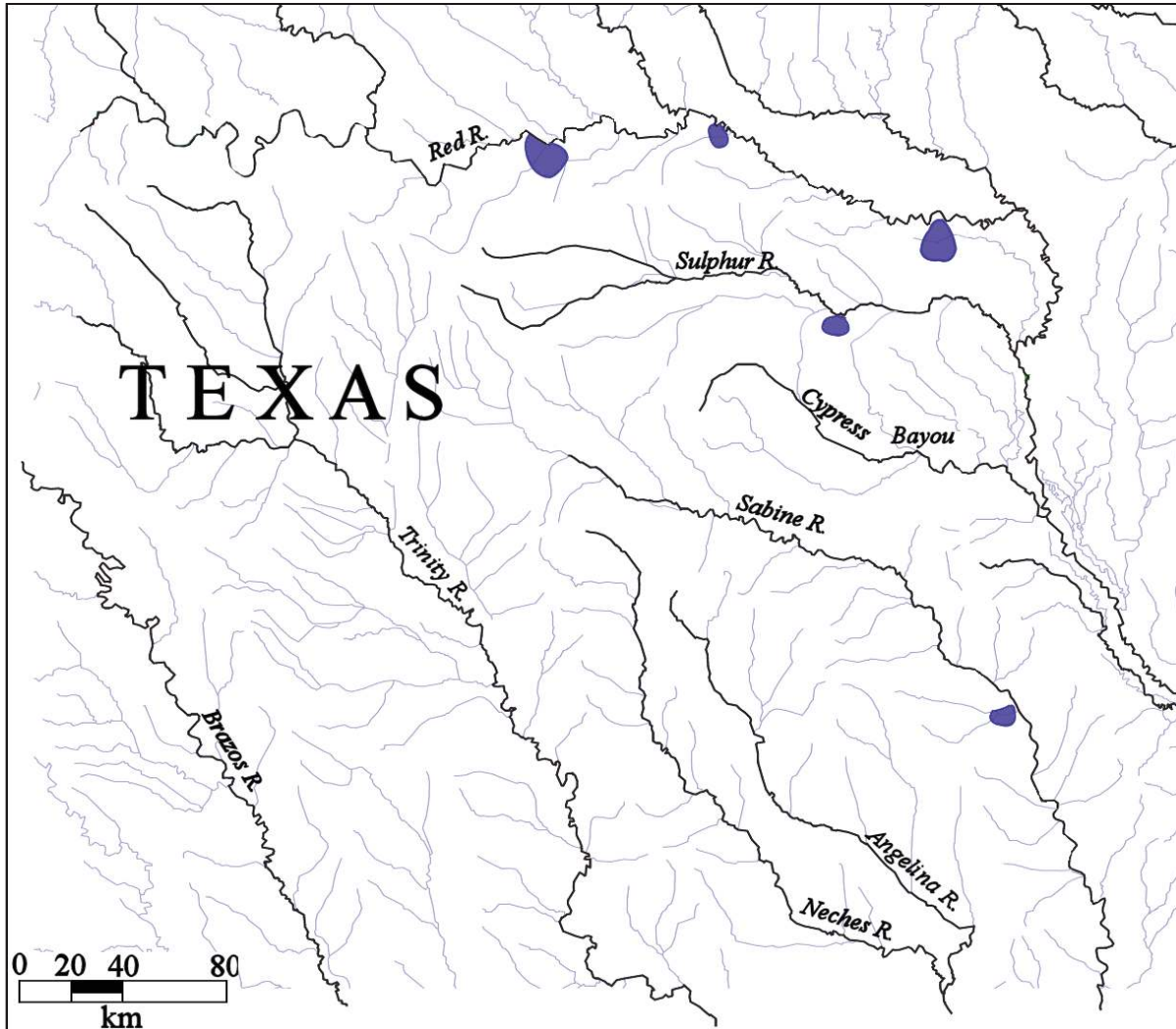


Figure 4. Distribution of sites where trailed sherds are most common in East Texas Caddo ceramic assemblages.

### Ridged Ceramics

Ridged utility ware sherds (i.e., from Belcher Ridged jars, see Suhm and Jelks 1962:11 and Plate 6) are common (in proportions greater than 4.0 percent of decorated sherd assemblages) 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 (Figure 6). These are sites of undefined taxonomic affiliation, but they apparently are representative of “a local group whose ceramic tradition was distinct from Titus [phase] or Belcher [phase] in a number of ways. Certainly they had contacts with both these regions” (Kelley et al. 2010:26).

Belcher Ridged is one of the principal utility wares in Belcher phase sites on the Red River in northwestern Louisiana and southwestern Arkansas (see Figure 6). This area is more than ca. 70 km north of the Sabine River sites where ridged pottery is relatively common. In Titus phase sites on the middle Sabine and in the Big Cypress Creek basin—west of Belcher phase communities and ca. 70 km or more northwest of the Toledo Bend Reservoir Caddo communities with ridged pottery—only between 0.2-2.2 percent of the decorated sherds in their ceramic assemblages are from ridged jars. It is suspected that these sherds are from vessels made either by Belcher phase or the aforementioned middle Sabine Caddo potters.

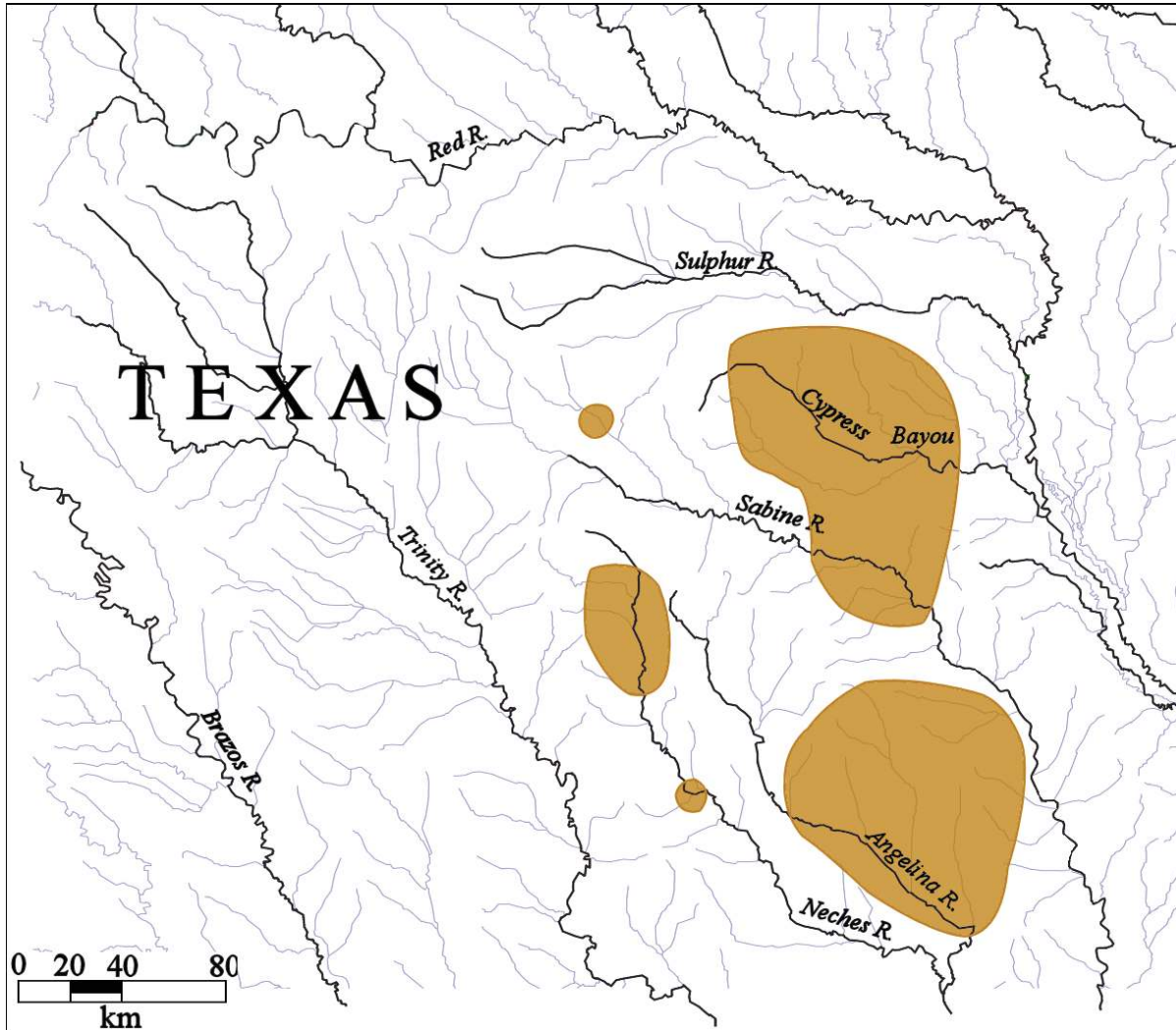


Figure 5. Caddo site clusters with high proportions (>60 percent of decorated ceramic assemblages) of brushed sherds in East Texas.

### Other Utility Wares

#### *Corn cob impressed*

Corn cob impressed sherds (i.e., Anglin Corn Cob Impressed) have been identified in only five sites in the East Texas Caddo ceramic sherd database (see Table 1). These sites occur only in the upper Sabine, Sulphur, and Red River basins in the region (Figure 7). In three of the sites, the corn cob impressed sherds date after ca. A.D. 1550, while in the two other sites the corn cob impressed sherds are in ca. A.D. 1200-1400 ceramic assemblages.

#### *Grooved*

Utility ware jar sherds with grooved decorative elements (i.e., from Lindsey Grooved vessels, see Marceaux 2011) are distributed in two clusters of Caddo sites in the upper Neches and Angelina river basins (Figure 8). These sites all date after ca. A.D. 1680 to ca. A.D. 1750 and are historic Caddo sites associated



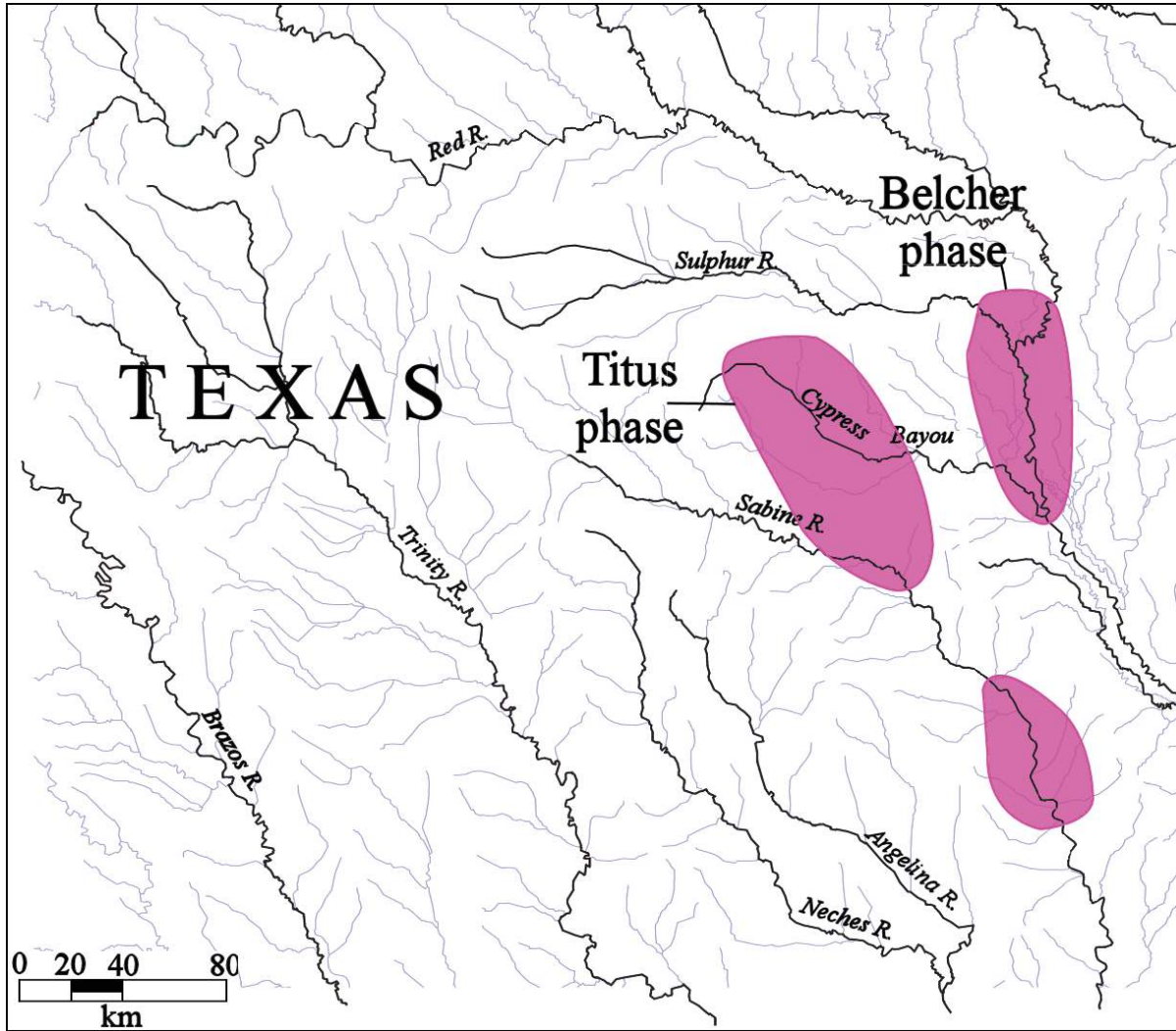


Figure 6. Distribution of sites where ridged ceramic sherds are present in East Texas, as well as the location of the Belcher phase and Titus phase sites with ridged ceramic sherds.

with the Allen phase (see Table 1). One grooved sherd from the Gilbert site (41RA13) in the upper Sabine River basin likely represents part of a vessel that was manufactured in one or the other of the two identified spatial clusters.

There are also a few grooved sherds from ca. A.D. 900-1300 contexts at three sites in the Neches, Red, and Sabine River basins, most notably at the George C. Davis site (41CE19). These grooved sherds are not related either stylistically or temporally with Lindsey Grooved wares, and are likely from Crenshaw Fluted vessels with deep vertical grooves or flutes (see Perttula and Selden 2015).

### *Lip Notched*

The notching of the lips of vessels at the sole rim decoration is an apparently distinctive decorative method in a number of different Caddo communities of different ages in East Texas. The earliest assemblages (n=6), dating from ca. A.D. 900-1300, with lip notched vessels occur in the upper Red, upper and middle Sabine, and in the Angelina River basins (Figure 9).

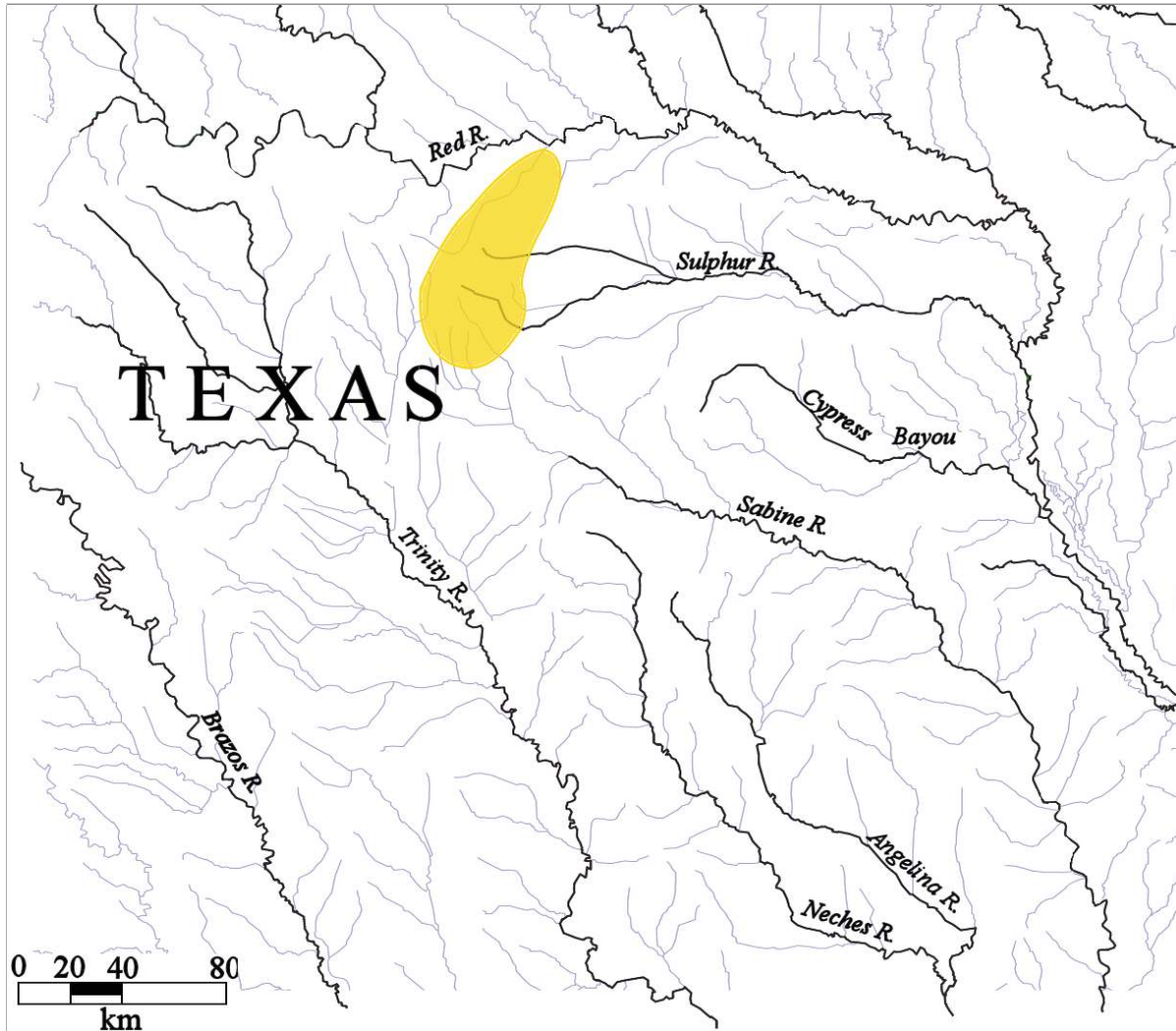


Figure 7. Distribution of sites with corn cob impressed sherds in East Texas.

Middle Caddo period communities where lip notched ceramics were made and eventually discarded ( $n=7$ ) include the same previously mentioned assemblages, as well as sites in the Big Cypress Creek basin (see Figure 9). By post-A.D. 1400 times until the early 18<sup>th</sup> century, ceramic assemblages with lip notched vessels ( $n=10$ ) occur more regularly in the upper Neches, middle Red River, middle Sabine, and the Angelina River basin (see Figure 9).

### *Neck Banded*

Neck banded jars were a common utility ware in a number of ancestral Caddo communities occupied after ca. A.D. 1300 in East Texas (Figure 10), including both grog-bone and shell-tempered varieties. The highest proportions (23.6-79.6 percent of the decorated sherd assemblage) of neck banded sherds (shell-tempered) occur in ca. A.D. 1400-1680 McCurtain phase assemblages on the middle reaches of the Red River. Shell-tempered neck banded sherds (Nash Neck Banded) are also found in high percentages at other sites on the same age in other Red River communities (Figure 10) both upstream and downstream from the McCurtain phase sites; both grog/bone and shell-tempered neck banded sherds are found in these areas.

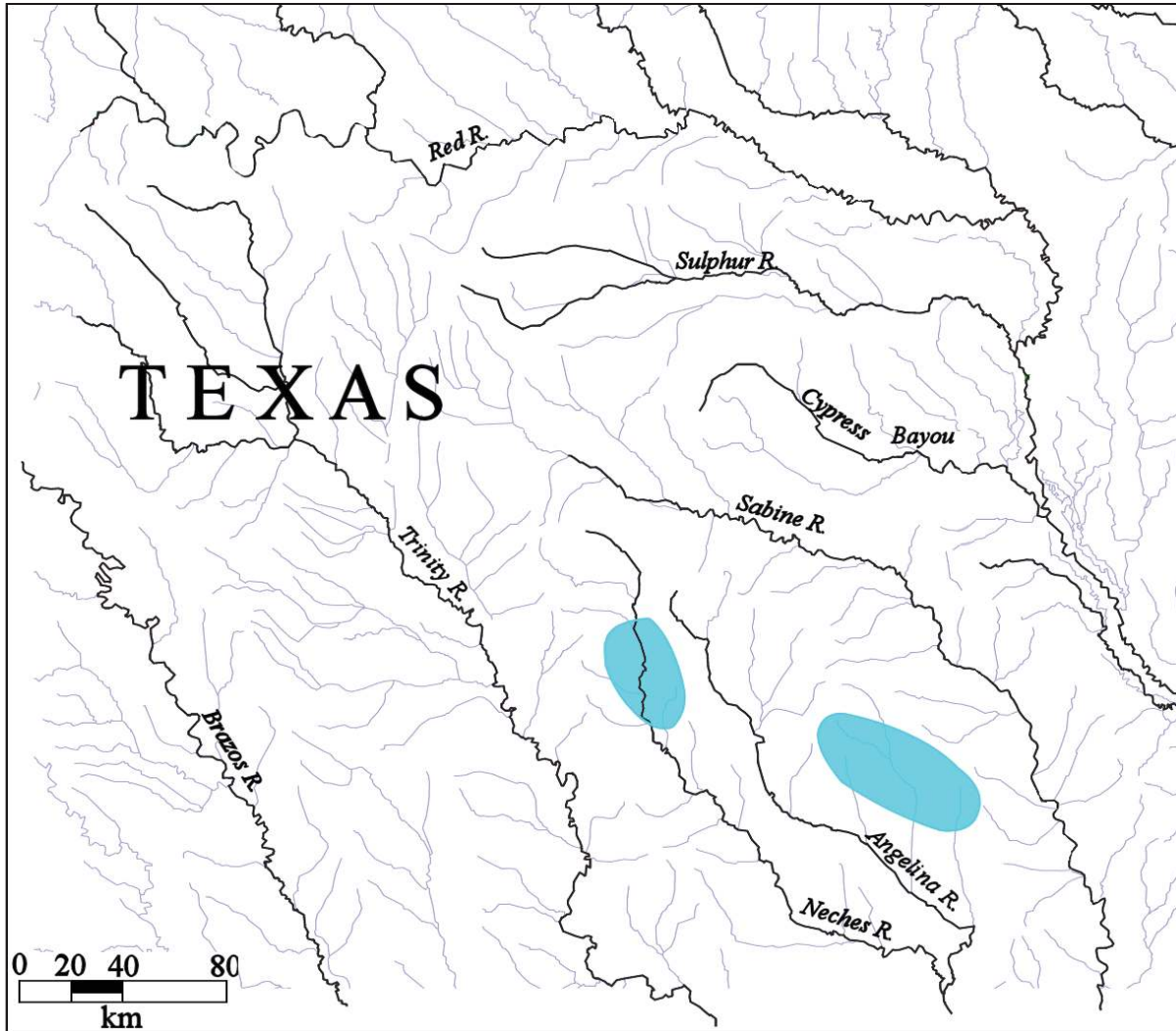


Figure 8. Distribution of East Texas Caddo sites with grooved sherds.

In other locales across East Texas, neck banded wares are almost exclusively grog/bone-tempered. These wares are found in sites in the upper Neches and upper Sabine River basins in Frankston (ca. A.D. 1400-1650) and Titus phase (ca. A.D. 1430-1680) contexts and in Titus phase ceramic assemblages in the Big Cypress Creek basin (see Figure 10). This ware has been classified as La Rue Neck Banded.

### **Spatial and Temporal Differences in Temper Use**

The principal tempering materials used by East Texas Caddo potters from as early as ca. A.D. 850 were grog (crushed sherds) and burned bone. The use of grog temper occurs in East Texas Caddo assemblages in each of the river basins, irrespective of their age, but the common use of burned bone has distinct spatial and temporal distributions. So too does the use of burned mussel shell by Caddo potters, although its use is much more restrictive temporally and spatially than is burned bone (see Table 1).



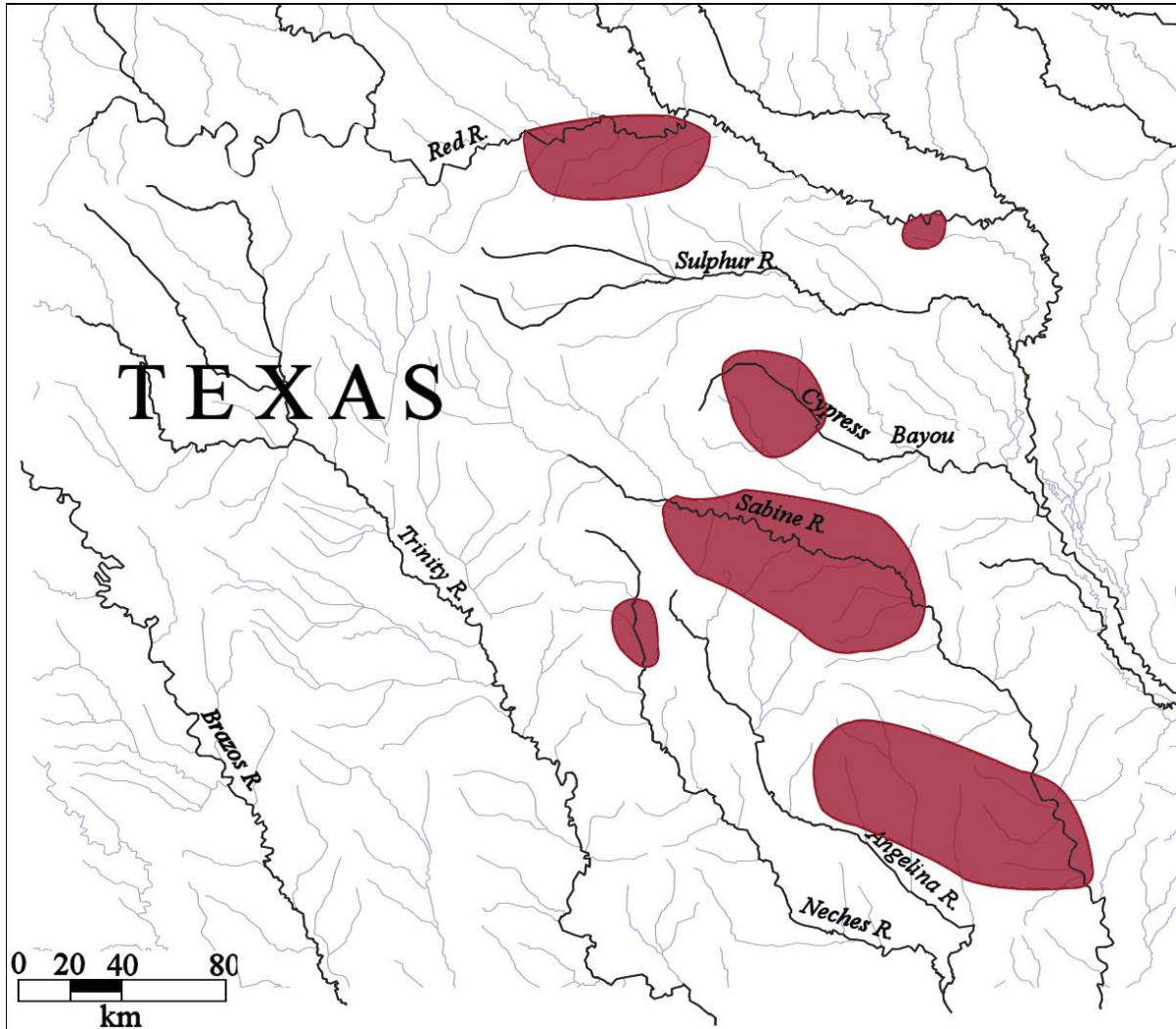


Figure 9. Distribution of Caddo site clusters with lip notched sherds in East Texas.

### Bone-tempered ceramics

The use of burned animal bone for the temper of ceramic vessels is a distinctive characteristic of East Texas Caddo ceramic sherd assemblages, and most ceramic assemblages in the region have some bone-tempered sherds (see Table 1). However, sherd assemblages with high proportions (>40 percent of the sherd assemblage) of bone temper are concentrated in only a few locales across East Texas, most notably in the Toledo Bend Reservoir area along the middle Sabine River and in sites in the Angelina River basin (Figure 11). Bone-tempered sherds are not a notable feature of Caddo ceramic assemblages in the Neches, Big Cypress, Sulphur, or Red River basins.

Pre-A.D. 1400/1450 Caddo sites with a high proportion of bone temper are found only in a few areas in the middle Sabine River basin, including the Redwine site (41SM193) (see Table 1). Late Caddo (ca. A.D. 1400-1680) sites and assemblages with high proportions of bone temper are found in one site in the Trinity River basin (41HE70, Story 1965), and in several sites in the mid-Sabine and Angelina River basins (see Figure 11). In fact, these sites are part of a previously identified Late Caddo bone-tempered and brushed ceramic tradition (Perttula et al. 2011b:Figure 6-71). Historic Caddo sites (dating from ca. A.D. 1700-1830) with high percentages of bone temper use are known only in the upper and middle Sabine River basins, and in the lower Angelina River basin (see Figure 11).

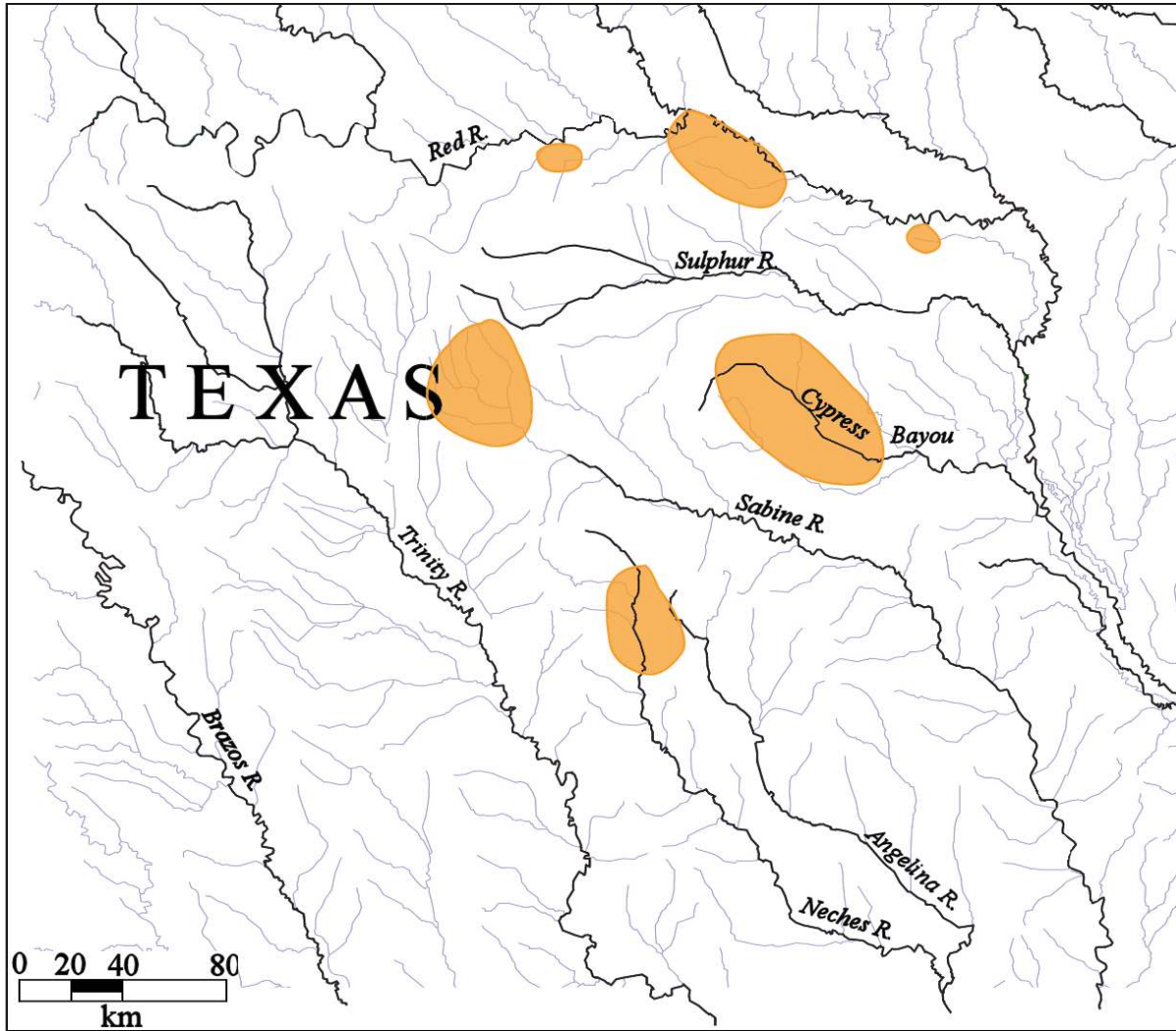


Figure 10. Distribution of areas of Caddo sites with high proportions (>5 percent of the decorated sherd assemblage) of neck banded sherds in East Texas.

### *Shell-tempered ceramics*

Perttula et al. (2012e) have reviewed the age and distribution of shell-tempered ceramics in Caddo sites across the southern Caddo area. In general, shell-tempered ceramics were made by East Texas Caddo potters after ca. A.D. 1300, particularly in McCurtain phase sites along the middle reaches of the Red River and the lower Kiamichi River in southeastern Oklahoma (Figure 12; see also Selden et al. 2014:Figure 4). In East Texas McCurtain phase ceramic assemblages, the proportions of shell-tempered sherds ranges from 93-100 percent (see Table 1).

Caddo sites dating between ca. A.D. 1400-1680 with considerable amounts of shell-tempered ceramic sherds are found at just a few sites in the upper Sulphur and the mid-Red River (41BW716) (see Figure 12). By contrast, high proportions of shell-tempered sherds in ceramic assemblages are relatively common in post-A.D. 1700 Historic Caddo sites only in the upper Sabine, the Big Cypress Creek basin, and in two locales on the Red River, both upstream and downstream from the McCurtain phase sites (see Figure 12 and Table 1).



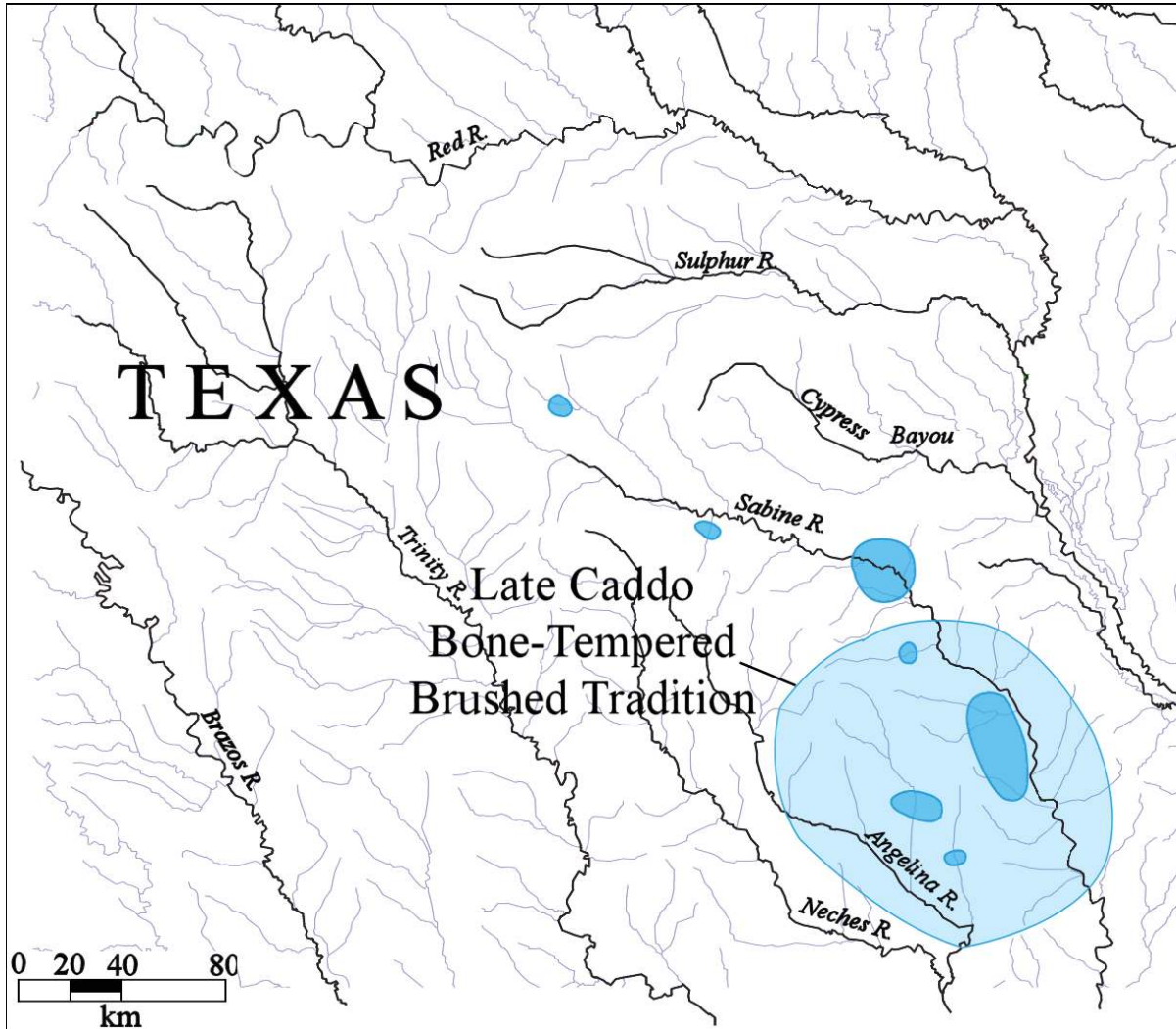


Figure 11. Clusters of Caddo sites with high proportions (>than 40 percent) of bone-tempered sherds in East Texas ceramic assemblages.

### FUTURE PROSPECTS

The analytical and archaeological findings reported on in this article are based on a consideration of the East Texas Caddo ceramic sherd database, and represent only an initial set of stylistic attributes that have distinctive spatial and temporal distributions across East Texas. These findings barely plumb the depths of the East Texas Caddo ceramic sherd database, and further analyses are warranted; hopefully other ceramic assemblages can also be added to the database.

The next step will be to more formally and statistically assess the regional variation in Caddo ceramic assemblages. This should be based on a further delineation of temporal (i.e., to the smallest temporal interval possible given available chronological data) and spatial divisions in the character of Caddo ceramics (i.e., principally data on decorative methods and the use of different tempers) across East Texas sites, and then constructing networks of similarities between ceramic assemblages from these sites (cf. Peebles and Roberts 2013:3003-3004) that can be used to assess the strength of cultural relationships among Caddo communities in the region through time and across space. These postulated relationships should then be explored to try to determine the underlying reasons for the existence of such relationships, including factors such as the

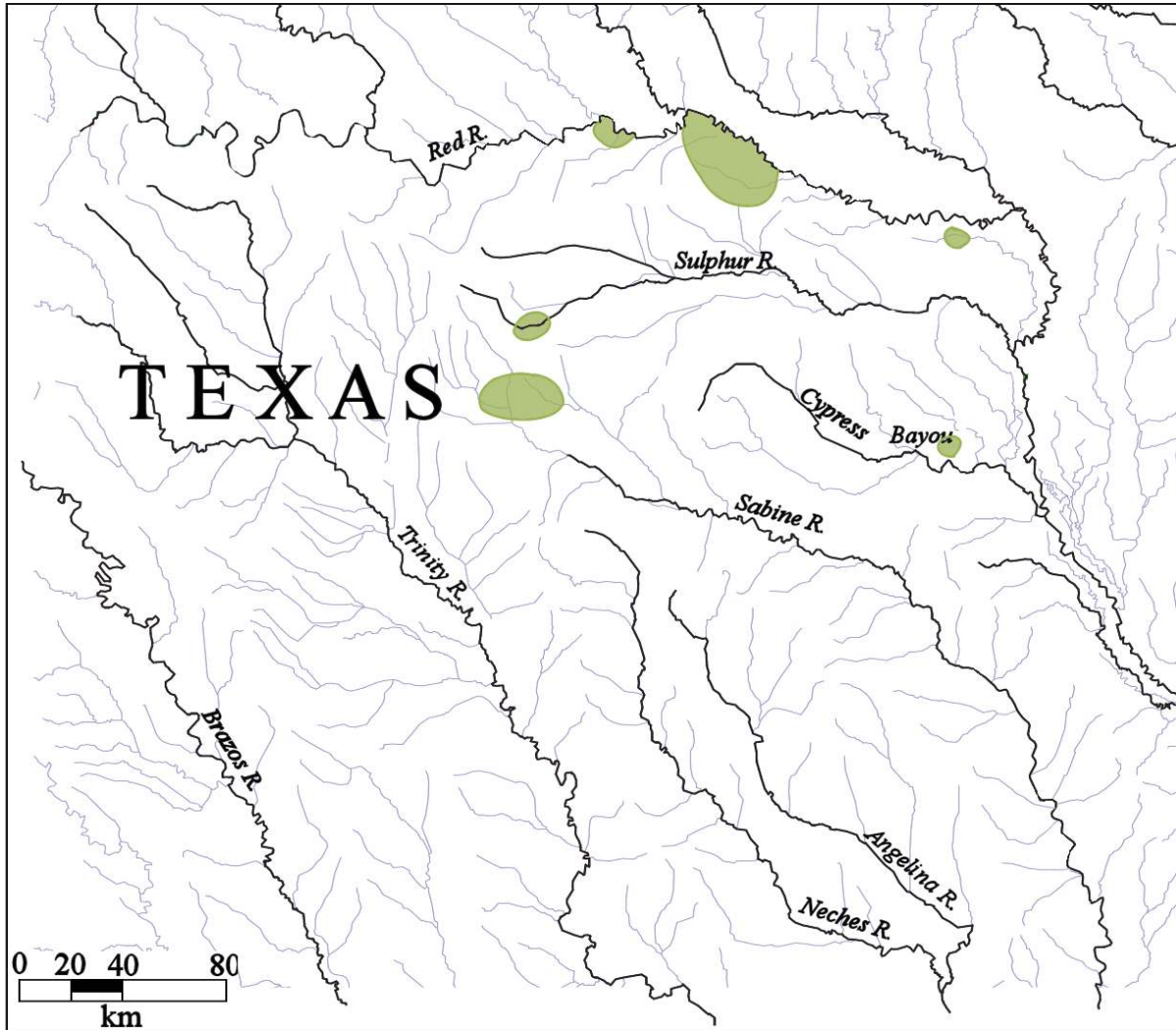


Figure 12. Clusters of Caddo sites with high proportions of shell-tempered sherds in East Texas ceramic assemblages.

frequency of interaction and direct contact between communities, trade and exchange of ceramic vessels, population movement, and similarities in the organization of ceramic vessel production. The results of past and current instrumental neutron activation analysis (INAA) and petrographic analysis of Caddo Area ceramics, including East Texas (where there is a robust INAA database) should also be explored as a means to corroborate production locales (cf. Selden et al. 2014), establish the chemical and paste characteristics of local fine ware and utility ware ceramics in assemblages, and evaluate the possible movement of ceramic vessels between different Caddo communities in East Texas and the broader Caddo world.

Finally, in conjunction with a database on 2D/3D-scanned Caddo ceramic vessels from East Texas sites, the East Texas Caddo ceramic sherd database should be made part of a digital database where comprehensive mathematical and quantitative analyses of morphological attributes and decorative elements on sherds and vessels can be conducted (e.g., Smith et al. 2014). Queries to such a combined database of vessels and sherds should lead to better understandings of regional Caddo ceramic typologies and their spatial and temporal underpinnings.

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