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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

# 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 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 (appliqued, appliqued-brushed, appliqued-incised, appliqued-punctated, brushed, brushed-incised, brushed-punctated, brushed-appliqued, incised, incised-punctated, neck banded, pinched, tool punctated, fingernail punctated,

Table 1. East Texas Caddo ceramic sherd database.

Table 1.	East	Tex	as (	Caddo	cera	mic	sherd	data	base.										
Trinomial	Tgrog	Tbone	Tshell	Tgrog-bone	Psandy	Freduced	Foxidized I	Finc-oxidized	d Fred-oxidized	d Rfdirect	Rfinverted	Rfeverted	Lfrounded	d Lfflat	Lfrounded-folded Lft	eveled Pr	ad Pw	hite	DMUWappliqued
41CP495	92.40	7.50	0.10													0.			1.00
41CP72 41RA13	94.10 12.00	5.60 44.40	2.20 23.10	0.90	19.40	42.30	2.90	4.80	50.00	55.50	22.20	22.20	80.00		20.00	1.	30 0.	90	3.50
41CE421	94.60	5.40	23.10	0.50	15.40	17.00	36.00	3.00	44.00	33.30	22.20	22.20	80.00		20.00		0.0	.01	0.30
41CE423	93.30			6.70															
41RA13 41CE426	11.90 99.00	29.50 1.00	48.10		10.50	13.20	31.10	1.90	53.80										0.60
41CE429	99.10	0.80				11.60	34.70	9.50	44.20										
41NA223	8.10	73.90	5.40	8.10	2.70	30.00	6.30	4.50	59.20	50.00	30.00	20.00	61.50	23.10	15.40		0.9	90	
41CE324	96.80	1.10		2.10	4.20	18.90	8.40	14.70	52.60	80.00	2.60	20.00	46.70	26.70	26.70		-0		
41AN87 41CE309	81.10 85.00	2.70 15.00		5.30	4.30	11.70	22.00	18.30	43.00	73.70	2.60	23.70	58.10	18.60	23.30	1.	iU		
41HE337	94.40	5.60																	1.30
41CE354	95.10	0.90		2.70	1.30	14.50	27.70	22.00	36.60	66.70	9.10	24.20	70.60	20.60	8.80		0.8	80	1.10
41RK191 41RK197																			
41RK200	38.60	42.40		19.00															0.30
41CP230	88.90	0.10		10.40	0.60														1.60
41WD52 41FK107																			5.20 0.50
41SM195	51.10			48.90															0.50
41TT650	65.00	1.60		23.00															
41UR279 41CP245	89.20	1.30	0.60	8.90		23.60	16.60	15.90	43.90							1.	10		1.30 2.40
41HS574	49.00	35.00		16.00															1.70
41BW171																			0.40
41WD46	95.00	5.00								100.00			63.20		36.80				1.30
41LR351 41SM442	83.00 92.20	3.80 7.00		13.20	0.80	14.70 20.00	15.60 12.00	9.40 24.00	56.10 44.00	97.30		2.70	61.50	24.40	14.10				0.60 1.40
41CE339	95.50	4.50			0.00	20.00	12.00	24.00	44.00										2.40
41CE445	94.50	5.50																	
41SM440 41SM442	85.00 92.90	13.90			1.10 0.20	21.40	21.00	35.70	21.40							0.	20		1.70
41SM444 41SM444	95.00	6.90 5.00			0.20											U.	.0		1.70
41CP239	87.00	13.00																	0.60
41GG31	90.50	8.90		0.60		20.00	42.00		67.00							0.	10		1.00
41MR6 41CP288	90.00 71.00	10.00 28.00			0.30	20.00	13.00		67.00										2.90
41TT758	83.00	17.00			0.50														
41FK107	57.90	2.90		39.20		10.40	16.30	9.50	58.50	94.60		5.40	79.70	11.40	8.90	0.			0.20
41CP490 41CE467	91.40 94.30	8.60		5.70		9.20	10.30	21.80	52.90							0.	0		3.90 0.30
41CP493	90.00	10.00		3.70		5.20	10.30	21.00	32.50										0.30
41CP8, Area A	92.00	8.00																	1.70
41CP496	98.50	1.00	0.50													2.		70	1.40
41HP237	93.20	0.40	1.10	5.30		21.00	13.80	14.50	48.10							3.	0.4	40	12.40
41HP238	93.40		4.40	2.20		15.60	28.90	8.90	42.20							9.			11.90
41HP240	92.20	0.50	3.30	4.00		20.70	20.00	15.80	41.20	81.50		18.50	58.30	9.40	28.10	3.			16.20
41WD208 41SM193	98.90 55.50	1.10 44.50														3.4	10 1.:	10	10.30
41SM55	55.50	44.50																	0.10
41HS524	81.70			18.30						73.30		26.70	56.70	30.00	3.30	10.00			
41PN149	75.40			24.60		20.40	40.20		42.20	39.00		61.00	73.00	13.80	13.80				
41RK476 41NA327	29.20			70.80		39.40	18.20		42.30										1.00
41SM56	65.50			34.50		81.00	19.00									1.	0'		
41SA135	35.90	5.10		59.00															4.00
41CP71 41CP490																			1.80 2.90
41TT891																			2.50
41TT892																			
41LR351 41UR10	82.90 82.30	3.80 17.70		13.30		14.70	15.10	9.40	56.60	91.80		2.00	55.00	24.50	20.20	0.	20		0.90 1.70
4101110	02.30	17.70														3.			1.70
41CE19	93.10			6.90													0.	20	
41HP78 41DT16	86.60	5.10 12.00		34.20	8.30 53.80														
41DT52	100.00	12.00		34.20	33.00														
41HP102	84.30		4.00																
41DT1	11.50	3.80		1.00	84.70														
41HP105 41DT80	14.90 15.90	8.90 31.10	4.50	1.00 2.20	75.30 46.20														
41HP105	79.40			6.70	2.90														
41HP78	87.00		1.00	11.00	4.00														
41DT80 41AN19	73.00 77.90	12.70	1.00	22.00 9.10	4.00 0.30														0.10
41NA144	77.50	12.70		3.10	0.50														0.10
41SY81																			2.70
41HS11 41MR211	20.00	2.00	26 00	20.70	1 20														1.40
41MR211 41HS835	29.60 22.00	2.60 55.00	36.80	29.70 23.00	1.30	12.80	19.10	6.40	61.70										2.50
41HE22																			
41HE166	98.50	1.50																	
41HE185 41HE184																			
41HE80	100.00																		
41AN67	99.20	0.80																	
41AN70	97.20	2.70			0.10														
41CE30 41CE86																			
41CE19																			
41CE19, Late																			1.20
41SB50 41SA89																			
41SA89 41SA94																			
41SB36																			
41NA11			0.30																

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

Trinomial	DMUWappliqued-brushed [	DMUWappliqued-incised	DMUWappliqued-puncta	ted DMUWbrushed D	MUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-applique	d DMUWincised DI	MUWincised-punctated
41CP495		0.70		48.60	2.60	0.90	0.70	16.00	1.50
41CP72 41RA13				19.50 52.70	6.30	1.80	0.90	15.00 9.10	4.40
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 41CE429				91.90 87.70	0.40	1.90 2.20	0.60 0.20	1.30 3.70	
41NA223				35.40	4.20	2.20	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 41HE337	0.10			66.90 34.90	1.60	1.40 0.70	0.50	12.10 18.80	1.80 6.00
41CE354				73.60	5.50	2.10	0.40	3.80	0.00
41RK191				75.30	0.40	3.10		12.80	0.40
41RK197				67.90	1.60	2.40		7.30	0.80
41RK200 41CP230		0.30		60.30 27.00	1.20 5.60	0.60 1.80	0.30	18.50 15.70	1.10 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 38.90	3.80
41TT650 41UR279				49.70	7.80			18.70	11.10 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 41WD46	0.90		0.40	49.50				55.00 13.50	16.80 4.40
41LR351	0.50		0.40	45.50				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 41SM440		1.30 1.50	1.30	48.80 40.60	1.30	2.90		25.00 33.30	5.00 1.50
41SM442		1.50		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 41MR6	1.50	0.20		10.70 59.10	0.70	0.40	0.50	3.50 4.40	1.30 0.70
41CP288	1.50			6.10	0.70			18.20	6.10
41TT758								24.60	2.90
41FK107		4.00		2.30	7.20	0.50	4.00	18.50	4.20
41CP490 41CE467		1.00 0.30	0.30	42.90 83.00	7.30 1.30	0.50 1.00	1.00	12.70	1.50 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 41SM193		1.10	1.10	8.00 27.80		7.70	1.10	3.40 13.40	1.10 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 41RK476	1.30			21.30 5.30		1.70		23.70 40.00	11.70 9.30
41NA327	1.50			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 41CP490	2.90	1.80 0.50	1.00	38.60 48.50	3.40	1.80 0.50		10.50 12.10	1.80 0.50
41TT891	2.50	0.50	1.00	40.50	3.40	0.50		22.00	6.80
41TT892				1.80				18.40	5.30
41LR351		2.70		20.20		5.70	2.00	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 41DT52				5.60 10.50	8.80			55.60 72.00	22.20
41HP102				10.50	0.00			72.00	
41DT1									
41HP105									
41DT80 41HP105									
41HP78									
41DT80									
41AN19 41NA144		1.20		74.20 64.60				6.10 14.60	2.40
41SY81		1.20		10.70				42.70	14.70
41HS11				50.80	10.70			8.80	
41MR211			2.50	60.30	7.50		2.50	15.90	3.20
41HS835 41HE22			2.50	72.50 31.60	7.50		2.50	7.50	
41HE166				18.50					
41HE185				50.70					
41HE184 41HE80				68.50 62.70					
41AN67				61.40					
41AN70				65.90					
41CE30				75.50					
41CE86 41CE19				75.50				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 41SA94				28.10				27.60	8.80 3.70
41SA94 41SB36				29.10 9.60				6.10 61.30	3.70 7.30
41NA11				47.00				12.60	7.00

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

Trinomial	DMUWneck banded	DMUWpinched	DMUWtool punctated	DMUWfingernail punctated	DMUWcircular punctated	DMUWcane punctated	DMUWridged	DMFengpunct.	DMFWengraved	DMFWengraved-appliqued
41CP495	0.30		3.70	0.40	0.50		0.20		20.20	
41CP72		0.90	6.30	0.90	0.90				32.70	
41RA13 41CE421	0.70	1.10	3.70 1.80	0.30					30.90 3.30	
41CE423									2.10	
41RA13			2.50						60.90	
41CE426 41CE429	0.60		1.30 1.10				0.40		3.10 2.60	
41NA223	2.10								45.80	
41CE324		1.60	0.50	1.60				0.00	9.60	
41AN87 41CE309		0.30 0.10	3.00 5.30	2.00				0.90	17.00 8.10	
41HE337		0.70	12.10	6.70					16.80	
41CE354	0.20		0.60						11.60	
41RK191 41RK197	0.40		2.20 4.00						4.90 16.10	
41RK200	0.04		5.80					0.20	11.80	
41CP230	5.70		3.60	5.90		0.20			16.90	
41WD52 41FK107	4.30	1.00	2.90 28.40	28.40				0.10	27.70 14.70	
41SM195		1.00	30.50	21.90					29.50	
41TT650			2.80	11.10					30.60	
41UR279 41CP245			1.30 7.90	1.30 0.80		0.60 0.80			16.10 17.30	
41HS574			5.10	3.40		1.70			8.40	
41BW171			8.00	2.70					17.20	
41WD46	2.20		11.80	0.90 1.90	0.50				8.80	
41LR351 41SM442			5.70 13.90	1.90 6.90	0.60 1.40				24.50 18.20	
41CE339	0.40	3.70	7.90	0.70	0.40				6.70	
41CE445		1.50	6.30	200					11.30	
41SM440 41SM442		1.50 0.30	7.20 12.80	2.90 6.80	0.30				8.70 15.10	
41SM444		0.50	3.50	0.00	0.50				10.30	
41CP239	1.80		2.40		0.60				22.60	
41GG31 41MR6	0.30	0.20	2.80	0.40			1.50	0.60	78.90 26.30	0.10
41CP288			20.20	35.40			1.50		14.10	
41TT758			4.40	53.60					14.50	
41FK107 41CP490	5.40	0.30 0.50	26.30 2.40	30.50	1.80				14.00 21.00	
41CE467	1.60	0.70	0.70						5.90	
41CP493			14.00	4.70					20.90	
41CP8, Area A			5.20	0.70					20.70	
41CP496			4.90	0.70					24.70	
41HP237	7.40		2.10	0.40					58.30	
41HP238	21.40		2.40	2.40	0.20				47.60	
41HP240 41WD208	10.00 21.80		3.20 2.30	0.50	0.20				44.60 49.60	
41SM193		1.30	12.40	3.20		3.50			22.60	
41SM55		2.10	15.90	9.00	0.40	0.10			6.60	
41HS524 41PN149			13.50 N/A	10.00 N/A	0.40 N/A	2.30 N/A			16.70 10.30	
41RK476			14.70	10.70	6.70	.,			10.70	
41NA327			2.00						12.10	
41SM56 41SA135			4.20 14.10	29.40 3.60				0.20	29.40 15.80	
41CP71	3.50		7.00	3.00				0.20	33.30	
41CP490	1.50		6.80						15.00	
41TT891 41TT892			20.30 19.40	22.00 9.60		0.90			28.80 43.80	
41LR351			5.10	2.60	0.90	1.70			28.20	
41UR10			1.70	1.00					35.70	
410510	0.10	2.00	1.00	21.00					14.30	
41CE19 41HP78	0.10	3.90	1.90	21.80					14.20	
41DT16			5.60	5.60	5.60					
41DT52				7.00		1.80				
41HP102 41DT1										
41HP105										
41DT80										
41HP105 41HP78										
41DT80										
41AN19	0.70	1.30	2.10	4.00			0.20		11.50	
41NA144 41SY81			1.20 2.70	9.30					18.30 12.00	
41HS11		0.80	N/A	9.50 N/A			0.80		12.80	
41MR211			•	3.20					15.90	
41HS835 41HE22				7.60					5.00	
41HE166				7.60 3.00					15.00 15.00	
41HE185				0.90					7.40	
41HE184				0.90					8.90	
41HE80 41AN67				1.00					8.70 9.70	
41AN70				0.60					7.50	
41CE30				0.60					7.10	
41CE86 41CE19				3.60					7.30	
41CE19 41CE19, Late				0.10					3.50 2.30	
41SB50							0.20		4.50	
41SA89									12.50	
41SA94 41SB36									7.80 11.10	
									15.10	

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 41CE423					1805 97	Walters and Perttula 2012 Walters and Perttula 2012	ca. 1680-1720 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 41CE324	1.10				48 188	Perttula 2008a Perttula and Middlebrook 2009	ca. A.D. 1750 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 41CE354		1.30 0.20		0.7 [Lip notched]	149 474	Perttula 2009c Perttula 2009d	ca. A.D. 1400-1500 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	0.20		1034	Nelson and Perttula 2003a	A.D. 1430-1600
41WD52 41FK107		24.30 2.40	0.20	0.5 [Lip notched]	820 212	Perttula 2005a Nelson and Perttula 2006	ca. A.D. 1430-1550 ca. A.D. 1200-1430
41SM195		2.40		olo [cip notened]	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 41BW171					59 262	Perttula and Nelson 1997 Perttula 2005b	ca. A.D. 1200-1430 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 41CE445					267 80	Perttula et al. 2012a Perttula et al. 2012a	ca. A.D. 1400-1480 ca. A.D. 1400-1480
41SM440					69	Perttula et al. 2012a 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	0.70	0.60		0.2 (1)	164	Perttula 2013d	ca. A.D. 1430-1600
41GG31 41MR6	0.70	2.20	0.70	0.2 (Lip notched)	1125 137	Perttula et al. 2013a Perttula et al. 2012b	ca. A.D. 1550-1680 ca. A.D. 1600-1680
41CP288		2.20	0.70		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				2.010	205	Perttula and Nelson 2012b	ca. A.D. 1430-1550
41CE467 41CP493		4.70		3.0 [Grooved]	305 43	Perttula et al. 2013b Perttula 2013e	ca. A.D. 1680-1720 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];			
41HP237 41HP238		2.50 7.10	0.40	5.7 [CCI]	283 42	Perttula 2009e Perttula 2009e	ca. A.D. 1550-1680 ca. A.D. 1550-1680
41HP240		14.70	0.60	2.9 [CCI]	1347	Perttula 2009e	ca. A.D. 1550-1680
41WD208		2.20			87	Perttula et al. 1993b	ca. A.D. 1430-1600
41SM193		1.00			597	Walters and Haskins 1998	ca. A.D. 1300-1430
41SM55		0.80			730	Walters and Haskins 2000	ca. A.D. 1200-1400
41HS524 41PN149		2.00			562 300	Perttula 2000 Haskins and Walters 2001	ca. A.D. 1000-1200 ca. A.D. 1400-1650
41RK476		1.30			75	Walters 2001	ca. A.D. 1000-1200
41NA327	1.00				99	Perttula et al. 2011a	ca. A.D. 1680-1720
41SM56					286	Walters 2009	ca. A.D. 1000-1200
41SA135 41CP71					468 57	Middlebrook 2010 Perttula 2010a	ca. A.D. 1400-1450 ca. A.D. 1500-1680
41CP490		1.00	0.50	0.5 [Lip notched]	206	Perttula et al. 2010a	ca. A.D. 1550-1680
41TT891		1.70			59	Perttula et al. 2010a	ca. A.D. 1000-1200
41TT892		0.90			114	Perttula et al. 2010a	ca. A.D. 1000-1200
41LR351		15.40			117	Perttula 2010a	ca. A.D. 1000-1150
41UR10					301	Jelks and Tunnell 1959 Thurmond and Kleinschmidt	ca. A.D. 1430-1550
41CE19				0.6 [Grooved]	803	1979	ca. A.D. 900-1300
41HP78					15	McGregor et al. 1996	ca. A.D. 980-1130
41DT16					18	Doehner et al. 1978	ca. A.D. 1200-1300
41DT52					57 187	Doehner et al. 1978	ca. A.D. 1200-1300
41HP102 41DT1					187 1	Doehner and Larson 1978 Hyatt and Doehner 1975	ca. A.D. 900-1200 ca. A.D. 900-1200
41HP105					18	Hyatt and Doehner 1975	ca. A.D. 900-1200
41DT80					8	Hyatt and Doehner 1975	ca. A.D. 900-1200
41HP105					26	Hyatt et al. 1974	ca. A.D. 1000-1200
41HP78 41DT80					5 15	Hyatt et al. 1974 Hyatt et al. 1974	ca. A.D. 900-1200 ca. A.D. 900-1200
41AN19		0.10			5868	Kleinschmidt 1982	ca. A.D. 1400-1650
41NA144					82	Corbin and Kisling 1983	ca. A.D. 1400-1650
41SY81		5.30			75	Robinson 1997	ca. A.D. 900-1200
41HS11		4.00			1048	Wormser 1991 Parsons et al. 2002	ca. A.D. 1550-1680
41MR211 41HS835					63 40	Parsons et al. 2002 Perttula 2002a	ca. A.D. 1800-1838 ca. A.D. 1430-1680
41HE22					133	Anderson et al. 1974	ca. A.D. 1430-1650
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 41AN67					1730 4116	Anderson et al. 1974 Anderson et al. 1974	ca. A.D. 1400-1650 ca. A.D. 1400-1650
41AN70					1590	Anderson et al. 1974 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 41SB50					488 4452	Fields and Thurmond 1980 Jelks 1965	ca. A.D. 1400-1650 ca. A.D. 1400-1680
41SA89					3409	Jelks 1965 Jelks 1965	ca. A.D. 1200-1400
41SA94					1960	Jelks 1965	ca. A.D. 1200-1400
41SB36					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.

rinomial	Tgrog	Tbone	Tshell	Tgrog-bone	Psandy	Freduced	Foxidized F	inc-oxidized F	red-oxidized	Rfdirect	Rfinverted	Rfeverted	Lfrounded	Lfflat	Lfrounded-folded	Lfbeveled Pr	red I	Pwhite	DMUWappliqu
1SA123			0.20																
1SB8			0.20																
1SA69			0.50																
SA116	00.20		0.20																44.00
BW3 UR118	99.20		0.80																11.90 0.90
UR133																			1.30
UR106																			2.90
UR130																			
UR109 UR105																			9.20
JR116																			
UR114																			
BW553	86.00	6.00	2.10	4.50	0.60	45.20	14.90	2.60	36.90	23.30			56.70	36.70		3.30			5.40
T670	87.00	0.20		12.40	0.20	39.60	18.90	5.40	36.10	29.00			52.60	34.20					1.00
1S240 CP408	57.20 66.10	13.00 10.30		26.00 22.80	1.50 0.80	28.50 17.90	16.90 9.60	10.00 11.10	44.60 61.40	70.80	8.30		73.30	8.30	4.20	2	.10		2.20 0.80
IA231	64.90	7.60		24.60	1.80	23.30	23.30	13.50	42.40	70.80	8.30		/3.30	8.30	4.20		.40		0.60
IA235	51.60	12.10		35.50		24.20	25.80	7.30	42.70								.10		
IA236	70.70	16.00		12.00	1.30	9.30	25.30	21.30	41.30									0.20	0.40
IA242	72.20	3.50		23.90	0.50	34.00	25.00	8.00	33.00								.10		0.10
A285 A338	68.70	11.50		14.70	1.70	19.40	11.90	10.40	54.00							0.	.40		0.10
IA21																			0.20
IA304																			
IA303	24.90	17.70	0.50	56.40	0.50	26.80	8.90	18.90	45.30										0.60
P106	70.10	6.80	0.30	22.20		45	42.00	45.45		97.90	0.50	1.60	90.00	22	8.20		70		
K170	76.00	7.40	0.70	14.90	1.70	15.70	12.10	15.10	57.10	88.00	4.60	7.40	68.40	22.10	7.40	1.	.70		0.20
P304 S15	89.60 44.00	1.10 16.00	0.70 0.01	7.50 40.00	1.10	23.90	13.90	11.00	52.20	83.50 4.00	0.80 2.00	15.70 69.00	45.00 36.00	17.30 5.00	37.70 36.00	n	.60	0.20	0.60 4.10
A49	75.90	24.10								73.00		27.00	61.90	25.40	11.90	0.	-		0.40
E70	44.40	50.00	3.40		2.30											0.	.20		
N6	83.70			16.30															
T1 M73	72.40		1.60	26.10															
v173 V174																			
и76																			
И82																			
V187																			
И89 400																			
И90 И91																			
E22																			
39																			
D529	99.20	0.80														0.	.50	0.60	11.20
D51	98.60	1.40																	17.70
E114 P175	57.00	0.10	40.50	2.10						11.00	26.40	62.60	22.40	32.80	44.80	1	.80		0.20 4.50
A5	14.70	25.70	25.70	3.50	30.60					11.00	20.40	02.00	22.40	32.00	44.00	1.	.00		1.60
W5	20.50	5.00	71.30		3.20														0.40
516	41.20	51.20		7.20	0.40	13.40	27.70		58.90	48.90	43.30	7.80	84.70	14.20	1.00				
N83 R1	68.80	24.10	43.80	7.10	FC 20														2.20
48			43.60		56.20														1.70
G33																			2.70
K3	52.00	43.00	5.10																2.50
W169	98.00	0.40	0.90	0.50		31.30	12.20	16.20	31.80										2.00
N716 N175	72.40	CC 70	27.60	13.00	1.50	38.30 20.40	16.10	7.40	38.30	76.00		24.00	85.00	15.00					1.40
20	18.80	66.70		13.00	1.50	20.40	8.40	18.00	53.50	76.00		24.00	85.00	15.00					1.40
19																			
30																			
39																			
154	400.00																		2.20
1 13	100.00															0	.10		7.70 3.40
			5.00	17.00						33.30	33.30	33.30	50.00	50.00			.10		3.40
11	76.00			6.00										66.70	33.30				
21	84.00		1.00										75.00	25.00					6.30
21 54	84.00 68.00		4.00	21.00								100.00							
21 54 63	84.00 68.00 76.00	6.00		21.00 15.00								100.00	16.70	83.30					0.00
21 54 63 D73	84.00 68.00 76.00 55.70	17.90	4.00	21.00 15.00 25.50								100.00	10.70	83.30					0.90
21 54 63 073 0482	84.00 68.00 76.00		4.00	21.00 15.00								100.00	10.70	83.30					0.90 2.00 7.70
21 54 63 D73 D482 D495 D538	84.00 68.00 76.00 55.70 64.40 57.40 86.70	17.90 11.20 5.10 5.10	4.00	21.00 15.00 25.50 16.50 30.00 7.60								100.00	16.70	83.30					2.00 7.70 12.50
721 754 763 7073 70482 70495 70538 70450	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90	17.90 11.20 5.10 5.10 0.90	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40								100.00	16.70	83.30					2.00 7.70
721 754 763 7073 70482 70495 70538 70450 70503	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80	17.90 11.20 5.10 5.10 0.90 1.60	4.00	21.00 15.00 25.50 16.50 30.00 7.60								100.00	16.70	83.30					2.00 7.70 12.50 1.50
T21 T54 T63 D73 D482 D495 D538 D450 D503 D109	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40	17.90 11.20 5.10 5.10 0.90 1.60 4.30	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20	8,20							100.00	16.70	83.30					2.00 7.70 12.50 1.50
21 54 63 073 0482 0495 05538 0450 05503 0109	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80	17.90 11.20 5.10 5.10 0.90 1.60	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40	8.20							100.00	16.70	83.30					2.00 7.70 12.50 1.50
721 754 763 773 784 785 785 785 785 785 785 785 785	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 32.70	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20	8.20							100.00	16.70	83.30					2.00 7.70 12.50 1.50 3.90 3.00
21 54 63 5073 6482 6482 6495 6538 6450 6503 6009 6142 6136 6139 638	84.00 68.00 76.00 55.70 64.40 57.40 86.70 82.80 95.40 32.70 95.00 91.80	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30	8.20							100.00	16.70	83.30			.00		2.00 7.70 12.50 1.50 3.90 3.00 8.90
221 554 663 D73 D482 D495 D5538 D450 D503 D109 1142 1136 1139 138 M243	84.00 68.00 76.00 55.70 64.40 57.40 86.70 82.80 95.40 32.70 95.00 91.80	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20		47.90	23.00		28.20			100.00	16.70	83.30			.00	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90
21 54 63 D73 D482 D495 D538 D450 D503 D109 H142 H136 H139 H38 H243 4	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 32.70 95.00 91.80	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60	0.10			14.50				100.00	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21 54 63 073 0482 0495 05038 0450 05503 01009 1142 1136 1139 1138 1243 4	84.00 68.00 76.00 55.70 64.40 57.40 86.70 82.80 95.40 95.40 91.80 45.70 72.30 74.30	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00	4.00 1.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20		23.00	15.80	14.50 17.80	46.70			10000	16.70	83.30		0.		0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21 54 63 D73 D482 D495 D538 D450 D503 D109 1142 1136 1139 138 12243 4 1325 769	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 32.70 95.00 91.80	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00	4.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60	0.10			14.50 17.80				2000	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 95.00 91.80 45.70 72.30 74.30 83.60	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90	4.00 1.00	21.00 15.00 25.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70	20.00	13.30	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21   54   563   773   7482   7495   7538   7538   75538   75538   7553   7553   7553   7553   7553   7553   7553   7553   7553   7553   7553   7554   7554   7554   7555	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 32.70 91.80 45.70 72.30 74.30 83.60 70.80 69.60 95.50	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50	4.00 1.00	21.00 15.00 25.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70	4.20	13.30 29.20	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 95.40 91.80 45.70 72.30 74.30 74.30 69.60 95.60 95.50	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50 17.30	4.00 1.00	21.00 15.00 25.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70 62.80	4.20 4.70	13.30 29.20 32.60	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 32.70 95.00 91.80 45.70 72.30 74.30 83.60 70.80 69.60 95.50 82.70 72.30	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50	4.00 1.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70	4.20	13.30 29.20	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
21   54   56   5773   778   779   77	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 95.40 32.70 95.00 91.80 45.70 72.30 74.30 83.60 70.80 69.60 95.50 82.70 72.30	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50 17.30	4.00 1.00	21.00 15.00 25.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70 62.80	4.20 4.70	13.30 29.20 32.60	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
221 554 663 7073 00482 00495 00503 00503 00503 00109 1142 1136 1139 138 144 4 4325 769 077 Creek #2 075 0524 48 074	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 32.70 95.00 91.80 45.70 72.30 74.30 83.60 70.80 69.60 95.50 82.70 72.30	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50 17.30	4.00 1.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70 62.80	4.20 4.70	13.30 29.20 32.60	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50
111 121 1521 1521 1521 1522 1523 1523 15	84.00 68.00 76.00 55.70 64.40 86.70 86.90 82.80 95.40 32.70 95.00 91.80 74.30 83.60 70.80 69.60 95.50 72.30 5.60 95.50	17.90 11.20 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50 17.30 27.70	4.00 1.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 15.20 49.30 8.20 47.90 27.60 17.10	0.10 1.30	23.00	15.80		46.70	66.70 62.80	4.20 4.70	13.30 29.20 32.60	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50 0.30 7.70
21   54   56   57   78   78   79   79   79   79   79   7	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 95.00 91.80 72.30 74.30 83.60 70.80 69.60 95.50 82.70 95.50 82.70 95.50 82.70 95.50	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50 17.30 27.70	4.00 1.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 49.30 8.20 47.90 27.60 17.10	0.10 1.30 1.40	23.00	15.80		46.70	66.70 62.80	4.20 4.70	13.30 29.20 32.60	16.70	83.30		0.	.90	0.90	2.00 7.70 12.50 1.50 3.90 3.00 8.90 2.50 0.30 7.70
21 54 63 7773 7773 7773 7773 7773 7773 7773	84.00 68.00 76.00 55.70 64.40 57.40 86.70 86.90 82.80 95.40 95.00 91.80 72.30 74.30 83.60 70.80 69.60 95.50 82.70 95.50 82.70 95.50 82.70 95.50	17.90 11.20 5.10 5.10 0.90 1.60 4.30 9.80 5.00 5.90 4.60 12.60 13.10 30.40 4.50 17.30 27.70	4.00 1.00	21.00 15.00 25.50 16.50 30.00 7.60 11.40 49.30 8.20 47.90 27.60 17.10	0.10 1.30 1.40	23.00	15.80		46.70	66.70 62.80	4.20 4.70	13.30 29.20 32.60	16.70	83.30		0.	.90	0.90	2.00 7:70 12.50 1.50 3.90 3.00 8.90 2.50 0.30 7.70

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

Trinomial	DMUWappliqued-brushed DMUWappliqued-	incised DMUWappliqued-puncta	ted DMUWbrushed [	OMUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-appliqu	ed DMUWincised DN	UWincised-punctate
41SA123			32.10				24.70	2.00
41SB8			57.80				23.90	3.30
41SA69			15.70				45.70	4.30
41SA116 41BW3			27.20	8.60			41.70 14.4 {Trailed-I]	4.50
41UR118			50.00	8.00	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	
11UR109			36.60		2.10		2.80	1.40
41UR105		0.00	23.90	0.60	1.20		17.10	4.40
11UR116		0.80	19.40	0.40	0.80		14.50	1.50 2.00
41UR114 41BW553			53.10 1.40	2.00	6.10 1.40		10.20 58.10	8.10
41TT670			1.40		1.00		53.10	4.10
11HS240			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
11NA235	0.70		41.40	5.70	3.60	0.80	22.50	3.70
11NA236	0.20		67.30	4.90	1.80	1.70	12.00	1.00
1NA242 1NA285	0.20		30.00 11.60	1.60 0.50	4.00 1.10	0.80 0.80	14.90 24.10	7.60 9.40
1NA338			72.80	0.30	1.10	0.40	3.20	5.40
1NA21			78.90	1.00	2.40	0.40	1.30	
1NA304			44.10	0.20	3.30	1.00	13.40	2.50
1NA303			37.80		2.80		10.20	4.80
1HP106	0.20	0.70	3.70	0.30	0.20		8.40	7.60
1RK170	0.20		2.80	0.20	2.00	0.20	25.70	16.00
1CP304	0.20	0.10	39.80	3.20	2.00	0.80	13.50	2.50
1HS15			66.10	2.00	F.C0	4.00	9.00	4.20
1NA49 1HE70	0.10		55.00 24.70	3.90 1.20	5.60	1.60	13.20 25.90	4.20 7.20
1HE70 1VN6			51.40	1.20			25.90	1.10
1DT1			320				39.20	5.90
1SM73			23.30	3.00			35.90	<del>-</del>
1SM74			74.70	1.10			2.20	
1SM76			68.90				16.70	
1SM82			86.70				4.00	
1SM87							42.90	
1SM89			37.90		1.20		31.60	2.10
1SM90 1SM91			60.50 82.70		1.20		13.60 6.10	2.50
1HE22			76.50				12.30	1.30
1CE39			75.20				15.90	
1WD529			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	
11RA5			7.90				9.50	
41BW5 41HS16		0.20	1.30 8.00		1.10		0.20 43.20	48.10 30.70
415A83			44.10		6.90	0.20	13.90	8.00
41LR1			44.10		0.50	0.20	13.30	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	
1BW716			47.40				15.80	
11PN175 11CP20			52.70 38.70	4.40	0.30	0.70	25.70 22.60	1.70 12.90
11RK19			40.40				35.60	12.50
1RK30			8.60				60.00	
1RK39			58.30				31.30	
1SM54		2.20	1.10		1.10		17.80	6.70
1HP1			2.60				12.80	
1TT13			11.20	0.60			7.30	
1DT11			3.70				37.00	35.00
1DT21			16.70				16.70 12.50	25.00
1DT54 1DT63							14.30	
1WD73							43.20	
1WD482			0.10				51.50	
1WD495							20.50	
1WD538							12.50	
1WD450							42.60	
1WD503							47.00	
1WD109			3.60				24.80	
11UR142			41.20				49.00	4.00
11UR136 11HE139		2.50	41.30 17.50				16.20 37.50	250
11AN38		2.50	76.00		4.00	2.00	6.00	2.50
1SM243			26.10		4.50	2.00	27.90	13.50
1RK4							31.30	10.30
1SM325	0.10	0.10	17.00	1.90	2.40		35.80	8.80
1TT769			10.20		2.60	1.00	10.20	3.60
lickory Creek #2			49.30	0.70	4.30		12.10	6.40
1WD75							91.70	
11WD524			68.90				3.30	
1RA48 1WD74			1.60 11.10				68.20 84.20	
1WD74 1RR15			11.10				o+.2U	
1RR204								2.70
	0.30		67.00	2.40	0.30		8.10	
1CP55	****		66.70	-		4.80	4.80	
11UR271 11CE19, Village							32.10	9.90
11CP55 11UR271 11CE19, Village 11CE19, Md. A 11CE19, Md. B							32.10 35.40 34.80	9.90 21.00 14.90

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

Trinomial	DMUWneck banded	DMUWpinched	DMUWtool punctated	DMUWfingernail punctate	d DMUWcircular punctated	DMUWcane punctate	ed DMUWridged	DMFengpunct	t. DMFWengraved D	MFWengraved-applic
41SA123									11.00	
1SB8 1SA69									3.90	
ISA116									13.90	
1BW3	1.70		4.40					2.20	39.50	0.30
1UR118	0.30		12.10	0.90					18.80	
1UR133		0.60	4.20	0.20					11.40	
1UR106	0.40	0.70	9.40	1.40					16.30	
1UR130 1UR109			5.80 4.20						19.20	
1UR105			9.00	7.20					22.00	
1UR116		1.10	9.10	9.10					20.50	
1UR114			8.20						18.40	
1BW553		1.40							10.70	
1TT670 1HS240			1.00	29.60					4.10 2.20	
1CP408			7.80	10.20		0.80		0.80	28.10	
1NA231	0.40	1.30	10.60	0.80	0.50	0.60		0.00	17.60	
1NA235		1.30	6.90	0.60	0.10	0.20			9.00	
1NA236		0.80	2.90	0.70				0.10	2.40	
1NA242		3.30 1.10	18.00 8.70	1.00 7.60	0.60 1.10	1.50 0.10		0.30	12.40 20.60	
1NA285 1NA338	0.40	1.10	8.70	7.00	1.10	0.10			15.90	
1NA21	0.40								14.90	
1NA304									17.50	
1NA303									27.40	
1HP106			10.70	2.40	2.70			0.60	10.80	
1RK170 1CP304	2.30	0.10	16.00 4.20	7.70 2.10	0.60	5.50		0.10	22.00 19.40	
1CP304 1HS15	2.30	2.40	4.20	3.60			0.70	0.10	8.10	
1NA49		0.10	7.70	1.40			****	0.20	6.10	
1HE70		3.00	28.90	3.00					10.20	
1VN6	0.60	0.60	17.70						8.00	
1DT1 15M72			15.70 2.40	21.50 33.50					17.60 0.60	
1SM73 1SM74		12.10	2.40	33.30					4.40	
1SM76		12.10		8.90					5.60	
1SM82									9.30	
1SM87									28.60	
1SM89			1.10	1.10					11.60	
1SM90 1SM91		1.10							17.30 3.90	
151V151 1HE22	0.40	1.80							7.00	
1CE39									4.40	
1WD529	14.40		0.20	2.80					41.60	
1WD51	26.00						0.70		40.10	
1HE114	0.20	1.60	4.20	22.00					5.60	
1HP175 1RA5		0.40 1.60	1.20	22.00					32.50 77.80	
1BW5		1.00							41.50	
1HS16			4.50	3.40					8.00	
1SA83		1.20							8.60	
1LR1									53.00	
1RA8 1GG33				5.00					13.80 3.80	
1RK3				2.50					26.60	
1BW169	4.00		3.00						46.40	
1BW716									36.80	
1PN175			3.00	2.40	0.30	0.30			7.80	
1CP20 1RK19									16.10 1.90	
1RK19 1RK30									2.90	
1RK39									2.10	
1SM54		1.10	11.10	3.30					14.40	
1HP1			2.60						74.40	
1TT13	3.90	3.40	2.70	11.00					57.30	
1DT11 1DT21			3.70	14.80 8.30					14.80 8.30	
1DT54			6.30	0.50					0.50	
1DT63			12.50	50.00						
1WD73									8.90	
1WD482	0.10								17.70	
1WD495	4.80								43.30	
1WD538 1WD450	3.00								47.50 26.50	
1WD503	4.40								26.50	
1WD109	2.60								44.80	
1UR142				18.00					24.00	
1UR136	3.20		45.00						19.00	
1HE139 1AN38	2.50		15.00 4.00	2.50					12.50 8.00	
1SM243		1.80	1.80	6.30					18.00	
1RK4			4.60	32.10					21.90	
1SM325		0.40	14.90	0.70		0.70			16.30	
1TT769	6.60		26.00	1.00	1.50				16.30	
lickory Creek #2		1.40							17.90	
1WD75 1WD524									10 00	
11WD524 11RA48									18.90 7.90	
1WD74									4.60	
1RR15	4.20								**	
1RR204	52.00								4.30	
1CP55	0.30		3.60						15.70	
1UR271	4.40	1.00	0.40	24.00					14.30	
1CE19, Village	1.10	1.80	0.10	24.00					26.90	
1CE19, Md. A 1CE19, Md. B	2.10 0.80			10.00 23.10					31.40 26.50	
	0.00			_5.20						

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

Trinomial	DMFWengraved-brushed	DMFWred-slipped [	OMFWtrailed	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		362 330	Perttula 2005c Nichols et al. 1997	ca. A.D. 1300-1650
41UR118 41UR133					474	Nichols et al. 1997 Nichols et al. 1997	ca. A.D. 1430-1550 ca. A.D. 1300-1550
41UR133 41UR106					276	Nichols et al. 1997 Nichols et al. 1997	ca. A.D. 1300-1550
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. AD. 1000-1200
41HS240					45	Perttula and Nelson 2002a	ca. A.D. 1300-1400
41CP408 41NA231	0.10	4.70			128 834	Sherman 2004 Perttula 2008b	ca. A.D. 1200-1400 ca. A.D. 1200-1400
41NA235	0.10				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		0.10			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 Gadus 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		0.50	0.50		51	Johnson 1962	ca. A.D. 900-1200
41SM73		0.60	0.60		167 91	Johnson 1961 Johnson 1961	ca. A.D. 1400-1650
41SM74 41SM76					90	Johnson 1961	ca. A.D. 1400-1650 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		1.10			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		0.50		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 41RA8				1.7 [Lip notched]	1450 58	Harris et al. 1965 Duffield 1961	ca. A.D. 1700-1730 ca. A.D. 1200-1400
41GG33				1.7 [Lip Hotcheu]	80	Jones 1957	ca. A.D. 1200-1400
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 3.70	1.70		178	Rogers et al. 2003 Gadus et al. 1992	ca. A.D. 1550-1680
41DT11 41DT21		3.70			27 12	Gadus et al. 1992 Gadus et al. 1992	ca. A.D. 900-1200 ca. A.D. 900-1200
41DT54		25.00			16	Gadus et al. 1992 Gadus et al. 1992	ca. A.D. 900-1200 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. 1200-1400
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		0.30		0.4 [lin a - 1 - 1 - 1]	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 ca. A.D. 1300-1430
Hickory Creek #2 41WD75		9 20			140	Perttula 2011a Bruseth and Perttula 1980	
		8.30			12 90	Bruseth and Perttula 1980 Bruseth and Perttula 1980	ca. A.D. 1000-1300
41WD524 41RA48		2.20 22.20			63	Bruseth and Perttula 1980 Bruseth and Perttula 1980	ca. A.D. 1430-1680 ca. A.D. 1000-1300
41KA48 41WD74		44.40			108	Bruseth and Perttula 1980 Bruseth and Perttula 1980	ca. A.D. 1000-1300 ca. A.D. 1000-1200
41RR15		95.80			24	Reese 2001	ca. A.D. 1400-1200
41RR204		2.00			2051	Kenmotsu 2005	ca. A.D. 1400-1680
41KK2U4 41CP55		2.00			332	Perttula et al. 2014a	ca. A.D. 1400-1660
					21	Campbell 2001	ca. A.D. 1430-1530
						p	
41UR271		1.60			2220	Stokes and Woodring 1981	ca. A.D. 900-1300
		1.60			2220 10654	Stokes and Woodring 1981 Stokes and Woodring 1981	ca. A.D. 900-1300 ca. A.D. 900-1300

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

Trinomial	Tgrog	Tbone	Tshell	Tgrog-bone	Psandy	Freduced	Foxidized	Finc-oxidized	Fred-oxidize	d Rfdirect	Rfinverted	d Rfeverted	Lfrounde	d Lfflat I	Lfrounded-folded	Lfbeveled Pre	d Pwhite	• DMUWappliqued
41AN1																		
41AN2 41AN8																		
41AN8 41AN23																		
41AN32																		
41CE3																		
41CE4 41CE8																	1.30	
41AN38	82.70	4.30		12.70	0.60	18.20	12.90	11.50	53.50	63.40	2.90	10.10	53.40	33.00	10.40	3.20 1.9		0.30
41LR170	92.20	2.00		5.90	4.20													
41LR186 41LR187	76.60 74.10	6.40 8.10	0.40	12.80 17.10	4.30 0.40	25.10	9.30	19.00	46.50									2.40
41NA27	82.70	0.10	0.40	17.30	0.40	23.10	5.50	15.00	40.50									0.50
41CP10																		4.30
41DT80	78.80	0.90	5.90		14.40													2.80
41DT124	89.60	8.60	0.40		1.40													2.80
41RR48	72.00	0.90		20.60	6.50													
11LR60	75.00	4.00	16.00	2.00	8.00													11.80
1LR39	74.40	1.10	0.30	23.70	0.60													
1RK19																		
1RK21 1RK32																		1.70
1RK36																		1.70
1RK39																		
1RK214	80.80	2.00		16.80		10.40	12.10	22.90	54.60	50.80	1.00	24.10	64.80	13.60	3.60	10.90		0.20
11GG33 11GG33	75.60 45.40	10.50 27.30		14.00 27.30		36.10 24.20	3.60 21.20	2.40 6.10	57.40 45.50	74.70	10.30	8.00	92.00	4.60	3.50			
11SY92	45.40	27.50		27.50		2-1.20	21.20	0.10	45.50									
1AN51	86.30	13.70																0.40
1CP71																0.8	0.40	1.90
1HS74	75.80	20.00			4.20													1.90
11BW5	26.70	2.20	68.60	0.20	2.30													
1LR2	51.40	6.20	10.20		32.20													3.10
1RR14	42.40	0.30	40.00	8.10	9.40	30.60	7.70	8.00	52.70									5.60
11RR16	63.20	3.00	4.60	29.10														4.60
1RR16			100.00															14.30
1RR11 1RR11			100.00															6.00 2.80
1RR236	39.70		60.30															24.10
1RR248			100.00															3.80
1RR290	61.90	1 20	38.10	0.20		22.20	11 10	9.00	40.00									2.20
1BW3 1TT672	88.70 83.30	1.30 3.30	1.80	8.20 6.70	6.70	32.30 24.20	11.10 16.10	8.00 19.40	48.80 40.30									2.30
1NA49	45.80	5.90	0.10	48.20	0.30													0.30
1HO50	77.40			22.60						30.00	10.00	60.00	89.50	10.50				
11TT653 11RR16	64.10 92.90	7.10		35.90		34.20	19.50	30.50	21.90									1.30
11RR16			100.00															
1CE19 1DT16	72.40	8.60	0.50	5.90														0.10
1MR2																		7.20
1UR11																		0.40
1MR12 1MR1																		0.70 0.50
1UR30	74.70	4.40		20.90		23.70	9.70	4.30	60.40	100.00			80.00	20.00				1.30
1TT653	77.90	8.20		4.10	2.10	16.00	17.60	11.50	45.50									2.40
1RK214 1RK215	85.50 100.00	0.90		0.90	12.80													1.80
1RK216	95.50				4.50													
1NA235																		1.00
1NA236 1NA244																		
11NA244 11NA248																		
1NA264																		
1NA285																		
11NA243 11NA247																		
11CP257																		
1CP272																		1.10
1FK107 1TT804																		0.60 9.10
111804 1TT310	72.00	28.00				34.00	8.60	22.30	35.00							3.4	)	9.10
1HS573	48.00	29.00	0.30	21.00	0.30												-	10.10
1HS574	57.00	20.00		17.00														15.20
1HS843 1HS844	38.00 63.00	36.00 11.00	6.60 0.60	16.00 25.00														9.10 1.60
1HS846	70.00	13.00	0.00	16.00	0.60													3.00
1HS588	58.90	3.40	2.60	35.00														0.80
11FT425 11DT11	64.00	19.00 13.90	0.10 3.00	13.00 13.80	3.00 4.60								78.50 35.70	20.40 50.00	1.10 10.70			
1DI11 1NA60	63.00 89.40	3.40	0.40	13.80 5.30	1.50	7.90	19.00	21.40	39.40	48.90	6.70	44.60	78.60	13.20	10.70 8.30		0.30	0.10
1TT372	83.20	1.10	2.40	14.60	1.10	17.30	16.50	32.50	33.80	.5.50	2.70	. 1.00	. 5.00		50		5.50	5.20
1CE354	100.00																1.30	
1CE354	96.00	0.90		2.70	1.30	14.50	27.70	21.10	36.60	66.70	9.10	24.20	70.60	23.50	5.90		0.60	1.10
1LR11 1LR31	69.20			27.20	3.50													1.80
1MX5	29.00	14.00			49.00					97.60		2.50	48.40	37.50	14.10	0.20	0	9.90
1HO91	84.60	5.10		7.70	2.60	15.40	20.50	12.80	51.30									
1CE461 1NA15	80.30	8.20	0.40	10.70	0.40	10.90	12.90	12.90	60.00									1.00
11HO263	72.90	6.30	5.40	18.80	2.10	2.00	14.00	6.00	78.00									1.00
11NA321	80.60	6.50		12.90		13.30	20.00	11.70	55.00									1.30

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

March   1988	Trinomial	DMUWappliqued-brushed	DMUWappliqued-incised D	MUWappliqued-punctat	ed DMUWbrushed DI	MUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-applique	ed DMUWincised DI	MUWincised-punctate
March					11.80	4.40	16.20			
March   Marc								2.40		
The state   100						1.90	2.80		2.80	0.90
NEXES							1 90		1 90	
THE COLOUR STATE OF THE CO						1.70			1.50	
MANUBIN										
Mile										
March   1.00			0.04		35.60	1.80	1.70	0.10		5.60
1400   1400										11 10
1842   140					2.40					
140						0.60				
1987    1987    1988	41CP10								23.40	
1987    1987    1988										
HEADED			1.40							17.00
1985   1985										
1988										
1988										
1982										5.50
MINISTED				0.20		0.10	0.20	0.50		
State										1.70
State										1.70
March   Marc										3.10
19633   1968   1969   1		1.10	0.10	0.03		0.40	4.80			
18702   7,00   1									66.40	14.40
13405   9.00   1						13.90	2.50	9.20	40 ==	0.67
14.00   15.0				0.10		0.30				
1879   1879			0.70	0.10			2.70	0.50		
13195   1400   1	0.,1		0.70		77.70	-1.50	2.70	0.50	13.50	1.40
MARTINA   1,000							0.10	0.10		7.80
130 1	41BW5		0.20						41.20	
18815   150	11LR2								36.30	
19816   1.50   1	410014				0.30				7.00	
STATE					0.30					6.40
SIMPLI							0.10			
HINDEL HEAVER SET			0.70	1.50			0.10			
18828					8.30					
HIRPAPO										
18W9   1.00				1.30						4.50
### PATHON PATHO					4.00	0.20		0.30		2.20
1814490								0.30		
141050							2.40			
14TPGS3								1.20		
410E19  41CE19  41CE19							1.90			
1.60										
410716 410716 410717 41	41RR16				0.70				2.70	1.20
44DT16  44MR2	41CE10				1.60				42.70	E 90
MANPE					1.00					3.80
41MR11         0.50         50.80         4.80         6.20         12.80         3.00           41MR12         4.80         7.00         4.50         1.50         8.80         0.60           41MR14         0.40         0.30         70.00         2.40         0.80         0.20         15.80         3.30           41MR215         1.10         0.40         42.60         2.40         0.80         0.20         15.80         3.30           41MR216         1.10         0.40         42.60         2.40         0.80         0.20         15.80         3.30           41MR216         1.10         0.40         42.60         3.30         1.00         15.90         3.50           41MR216         1.00         3.64         9.70         7.20         1.00         19.50         2.10           41MR216         0.70         67.00         3.40         3.40         1.50					5.40		11.70	6.40		
41MR1         0,40         0,30         70.00         4.50         1.50         8.80         0.00           41HR33         1,10         0.40         42.60         2.40         0.80         0.20         15.80         3.30           41HR315         1.0         0.40         42.60         4.70         1.00         1.50         2.810         2.80           41HR315         4.0         4.20         4.70         1.00         1.95         2.70         6.70         3.00         1.00         1.95         2.70           41HR326         0.70         6.70         3.60         9.70         7.20         1.00         1.95         2.70           41HR326         0.70         6.70         4.40         4.50         1.50         1.50         1.76         7.80           41HR326         0.70         7.20         4.00         1.50         1.50         1.76         7.00           41HR326         0.70         4.00         4.00         1.50         1.50         1.50         1.70         7.00         7.00         7.00         7.00         7.00         7.00         7.00         7.00         7.00         7.00         7.00         7.00         7.00			0.50				4.80			3.00
41URSO   1.10										
11163   1.10			0.40	0.30	70.00		4.50	1.50		
414K214   22.70			1.10	0.40	42.60	2.40	0.00	0.20		
44N215			1.10	0.40			0.80	0.20		
MINISTANDA										
14141235     36.0   9.70   7.20   1.00   1.950   2.10   14141244   1.00   1.950   2.10   14141244   1.00   1.950   3.40   3.40   3.40   1.40   1.910   3.10   4180   4140   4.40   1.50   1.50   1.50   1.760   7.40   4180   4140   4.40   1.50   1.50   1.50   1.50   7.60   4.80   4140   4140   4.40   4.40   4.40   4.50   4.30   2.10   4.30   4.40   4.						3.30				
MINAZAM   S.90   A.40   1.50   1.50   1.50   7.60   7.40	41NA235									
1411-1428			0.70							
1411-1426							1.50	1.50		
1411A225							2.10			7.00
11112423					9.80				29.40	7.40
1410257 1410277 1410277 14102	11NA243				65.90	4.50	9.10		9.10	
1410   1410						5.40	2.70			21.60
117807 117807 117808 117809 11							2.00			4.22
41TB04       4.50       1.50       1.60         41TB310       3.40       3.40       24.10       3.40         41H5573       65.80       4.70       0.70       2.40         41H5574       36.20       4.80       5.20       2.40         41H5844       37.20       5.20       2.80       1.50       9.80       1.71,10       4.50         41H5846       2.560       2.560       2.80       1.50       9.80       4.60         41H5858       0.10       6.610       2.80       1.50       9.80       4.60         41H745       2.70       0.50       2.80       1.50       9.80       4.60         41H745       2.70       0.50       2.80       1.50       9.80       4.60         41H7475       2.70       0.50       2.80       1.50       9.80       4.60         41H7475       2.70       0.50       2.80       0.30       3.50       2.90       0.30       3.70       0.30       3.80       11T1372       3.60       3.50       2.90       0.40       3.80       11C1254       3.60       2.50       2.90       0.40       3.80       1.60       3.60       1.10       3.60 <td< td=""><td></td><td></td><td></td><td></td><td></td><td></td><td>3.30</td><td></td><td></td><td></td></td<>							3.30			
41T110       41.40       3.40       4.70       3.40       3.40       4.70       0.70					1.90	4.50				J.4U
41HS573					41.40					3.40
41HS574 41HS843 41HS844 41HS844 41HS846 41HS848 41HS888 41HS8888 41HS8888 41HS888888888888888888888888888888888888	41HS573				65.80					0.70
14115844       37,20       23,00       0.80         14115866       0.10       63,10       2.80       1.50       9.80       4.60         1417425       2,70       0.50       2.80       1.50       9.80       4.80         1417171       2,70       0.50       0.90       0.30       5.20       0.30         4117472       0.70       19.20       4.40       0.70       34.70       0.30         4162854       7.00       7.30       5.50       2.90       0.40       3.80         41811       73.60       5.50       2.90       0.40       3.80         418141       66.70       3.30       3.90       2.60       7.70         41814091       66.70       2.80       7.70       2.60       7.70         418141       7.60       7.60       1.10       0.70       0.40       3.80         418141       7.60       7.60       3.90       2.90       0.40       3.70       3.60         418141       7.60       7.70       7.70       7.70       7.70       3.60       7.70       7.70       7.70       7.70       7.70       7.70       7.70       7.70       7.70       7.70<	41HS574				36.20				5.20	2.40
41HS86 0.10 2.60 2.80 1.50 9.80 4.60 41HT425 2.80 0.10 63.10 2.80 1.50 9.80 4.60 41HT425 3.00 3.00 4.80 41HT425 3.00 3.00 3.00 5.20 3.00 3.00 4.80 41HT425 3.00 3.00 5.20 3.00 3.00 5.20 3.00 3.00 41HT4727 3.70 3.70 3.00 41HT4727 3.70 3.70 3.70 3.70 3.70 3.70 3.70 3.7										
41HSS8     0.10     63.10     2.80     1.50     9.80     4.60       41F425     2.70     0.50										
41F1425     2.70     0.50     4.80       41DT11     42.90     7.10       41DT11     42.90     7.10       41DT17     7.230     2.10     0.90     0.30     5.20     0.30       41TT372     0.70     19.20     4.40     0.70     3.470     0.30       41CE354     7.10     1.30     1.30     7.90     3.80       41CR11     73.60     5.50     2.90     0.40     3.80       41LR31     41.00     4.00     3.90     4.90     4.90       41MM5     66.70     2.60     7.70       41CE461     83.70     1.10     0.70     0.40     6.00     0.30       41MM25     6.70     7.630     1.10     0.70     0.40     6.00     0.30       41MM263     4.91     9.10     4.00     6.00     0.30			0.10				2 80	1 50		
141011			0.10			0.50	2.00	1.30		
1111460   0.05   72.30   2.10   0.90   0.30   5.20   0.30   111772   0.70   19.20   4.40   0.70   0.70   34.70   0.30   111772   0.70   19.20   4.40   0.70   0.70   34.70   0.30   11117372   0.79   0.40   0.79   0.40   0.79   0.40   0.79   0.40   0.79   0.40   0.79   0.40   0.79   0.40   0.79   0.40   0.79   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70   0.40   0.70										
41TT372     0.70     19.20     4.40     0.70     34.70     0.30       41CE354     71.10     1.30     1.30     7.90     3.80       41CE354     73.60     5.50     2.90     0.40     3.80       41CE354     31.60     3.60     3.60     3.60     3.60       41CE354     2.46.00     3.30     3.90     3.43     4.90       41MM5     66.70     2.60     7.70       41CE461     83.70     0.70     0.40     6.00     0.30       41MA15     6.70     9.10     1.270     3.60       41MC263     49.10     9.10     1.270     3.60	41NA60		0.05					0.30	5.20	0.30
41CE354     73.60     5.50     2.90     0.40     3.80       41LR11     31.60       41LR31     2.46.0     3.90     3.90     3.43.0     4.90       41H051     66.70     2.60     7.70     3.00     2.00       41CE461     83.70     1.10     0.70     0.40     6.00     0.30       41H0263     49.10     9.10     1.270     3.60	41TT372			0.70	19.20	4.40	0.70		34.70	
41R11     31.60       41R31     24.60       11M5     3.30     3.90     34.30     4.90       41H091     66.70     2.60     7.70       41CE461     83.70     2.00     2.00       41H015     76.30     1.10     0.70     0.40     6.00     0.30       41H0263     49.10     9.10     12.70     3.60										
41LR31       41MX5     0.20     3.30     3.90     3.4.30     4.90       41HM091     66.70     2.60     7.70       41CE461     83.70     2.00     2.00       41HN15     76.30     1.10     0.70     0.40     6.00     0.30       41H0263     49.10     9.10     12.70     3.60					73.60	5.50	2.90	0.40		
41MX5     0.20     3.30     3.90     34.30     4.90       41HO91     66.70     2.60     7.70       41CE461     83.70     2.00       41HA15     76.30     1.10     0.70     0.40     6.00     0.30       41H0263     49.10     9.10     12.70     3.60										
11H091     66.70     2.60     7.70       11CE461     83.70     2.00       11H015     76.30     1.10     0.70     0.40     6.00     0.30       11H0263     49.10     9.10     12.70     3.60				0.20	3 20	3 00				4.00
11CE461     83.70     2.00       11NA15     76.30     1.10     0.70     0.40     6.00     0.30       11H0263     49.10     9.10     12.70     3.60				0.20		3.50		2.60		4.50
11NA15     76.30     1.10     0.70     0.40     6.00     0.30       11H0263     49.10     9.10     12.70     3.60								2.00		
49.10 9.10 12.70 3.60						1.10	0.70	0.40		0.30
41NA321 63.00 3.90 0.60 1.30 6.50 1.90	41HO263				49.10		9.10		12.70	3.60
	11NA321				63.00	3.90	0.60	1.30	6.50	1.90

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

	DIVIOWNECK banded	DMUWpinched	DMUWtool punctated [	OMUWfingernail punctated [	DMUWcircular punctated	DMUWcane punctated	1 DMUWridged	DMFengpunct.	DMFWengraved DN	IFWengraved-appli
IAN1	8.80	2.90	7.30						38.30	
AN2	17.10		7.30	7.30					39.00	
N8	0.90	0.90		1.90					25.90	
AN23		2.90							51.40	
AN32 CE3		6.70	1.90						42.30 10.00	
E4	2.70	6.70							18.70	
E8	18.70	4.00	2.70						45.30	
AN38	0.10	0.40	10.40	0.50		0.20		0.40	20.70	
R170				9.10		18.20			27.30	
R186		11.10		11.10					33.30	
R187			9.80	22.00					29.30	
NA27	0.03	0.01	0.60	0.80					6.00	
CP10									35.20	
DT80	8.50		5.40	47.90	5.40			2.80	12.70	
DT124 RR48			5.40 4.30	8.90	5.40 4.30			3.60	7.10 4.30	
.R60			7.80	2.00	4.50				2.00	
			7.00	2.00					2.00	
R39		2.60	13.20	0.90				0.40	14.00	
RK19	0.30	0.10	26.70	3.50					7.20	
RK21		0.70	8.90	0.70					6.70	
RK32	1.70		23.30	3.30					3.30	
RK36			19.20						7.70	
RK39			10.30						11.30	
K214		0.60	7.50	22.50	0.30	1.80			11.30	
G33		2.90	7.20	2.00					6.40 2.50	
G33 Y92			1.30						19.50	
N51		1.90	20.80	8.60	2.30	0.10			16.30	
P71	0.50		3.40					0.70	18.70	
HS74				4.30					22.80	
BW5			2.20	0.20					52.80	
R2	16.50			10.00					24.40	
RR14	0.80								51.60	
R16	25.20								13.20	
R16	35.30								21.70	
R11 R11	8.30								31.30 25.00	
R236	6.50			13.80					10.30	
R248	79.60			15.00					5.70	
RR290									20.00	
3W3			2.00	0.30	1.00			1.00	43.00	
T672			16.10	4.80					14.50	
NA49		0.60						0.10	13.40	
1050				1.20					7.10	
TT653							1.90		17.30	
RR16 RR16	23.60								0.60 29.80	
IIII	23.00								25.00	
CE19	0.40	0.40	0.40	3.70			0.30		10.00	
OT16				11.80			5.90		29.40	
∕IR2	0.60		5.40			1.60		0.10	37.90	0.10
R11		2.40	1.00	0.80				0.20	9.10	
ЛR12									32.80	
/R1	0.10						1.50		7.40	
JR30		2.00	9.20	8.50	2.00				34.70	
T653 K214	0.90		9.40 15.70	1.00 14.90	0.20	0.10			4.70 9.60	0.10
K214									29.20	
K215 K216			16.70 13.30	16.70	10.00			6.70	6.70	
A235	0.50		8.70	1.00		1.00			10.80	
A236		0.70	1.40	0.70		*****			<del>-</del>	
A244			7.40	13.20		3.00			23.50	
A248			4.80	4.80					26.50	
A264			2.10	4.30	2.10				6.40	
A285		1.60	8.20	7.40					32.80	
A243			9.10	E 40		2.30			6.80	
A247 P257	1.20		8.10 13.00	5.40 13.00					16.20 23.50	
P257 P272	2.20		6.50	4.40		1.10			15.20	
K107	2.20		7.00	54.10		3.80			11.40	
T804			4.50	45.40		******			18.20	
T310			3.40	17.20					6.90	
S573			2.90	1.80			1.10		12.30	
S574		3.30	23.90	1.40					21.00	
\$843									29.30	
S844		0.80	5.00	10.70					20.70	
S846	0.60	0.60	8.30	6.00					19.10	
S588		0.80	5.80	1.40			0.40		9.70	
T425		1.60	8.10	27.00					29.70	
T11	0.10	0.60	1.30	4.60	0.10				35.70	
IA60 T372	0.10		1.50 8.10	0.10 8.80	0.10				12.70 23.20	
E354	1.30		0.10	0.00					14.50	
E354 E354	1.30 0.20		0.60						14.50 11.60	
R11	0.20		5.30	26.30					26.30	
R31			5.50	8.80					14.00	
1X5	15.60		1.20	3.10					19.10	
	13.00	2.60	5.10	5.10					15.40	
		2.00	3.10		2.00				10.20	
091										
O91 E461 A15		0.20	1.90					0.10	11.40	
O91 E461	3.60	0.20	1.90 9.10 5.80	3.60	1.90 0.60			0.10	11.40 7.30 13.00	

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

Trinomial	DMFWengraved-brushed	DMFWred-slipped Df	MFWtrailed	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
41DT80		4.20		2.8 [Painted]	71	McGregor et al. 1996	A.D. 1500+
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			
41LR39		14.90		[Grooved]	235	Mallouf 1976	ca. A.D. 1000-1200
41RK19		0.50		0.1 [Stamped]	1864	Clark and Ivey 1974	ca. A.D. 1200-1400
41RK21		0.70			135	Clark and Ivey 1974	ca. A.D. 1400-1500
41RK32		1.70			60	Clark and Ivey 1974	ca. A.D. 1200-1400
41RK36					26	Clark and Ivey 1974	Ca. A.D. 1680-1730
41RK39					97	Clark and Ivey 1974	ca. A.D. 1200-1400
41RK214		0.80	0.03	0.03 [Lip notched]	3847	Rogers and Perttula 2004	ca. A.D. 1200-1450
41GG33				0.6 [Lip notched]	343	Perttula 2011b	ca. A.D. 900-1200
41GG33					79	Perttula 2011b	ca. A.D. 1500-1680
41SY92					1862	Middlebrook 1994	ca. A.D. 1200-1400
41AN51		11.30			688	Perttula et al. 2012d	ca. A.D. 1200-1400
41CP71		6.20	0.50		418	Perttula and Nelson 2004a	ca. A.D. 1430-1680
						Heartfield, Price and Greene	
41HS74				0.03 [Lip notched]	2912	1988	ca. A.D. 1200-1450
41BW5		0.50			417	Gilmore 1986	ca. A.D. 1700-1760
41LR2		10.00			455	Krieger 2000	ca. A.D. 1100-1400
							ca. A.D. 1100-1300,
41RR14		25.40			126	Prikryl 2008	1500-1700
41RR16		17.40			219	Perttula 2008c	ca. A.D. 1100-1300
41RR16		6.10	1.40	0.3 [Lip notched]	1094	Perttula 2008c	ca. A.D. 1400-1680
41RR11		18.70			134	Perttula 2008d	ca. A.D. 1100-1300
41RR11		30.60			36	Perttula 2008d	ca. A.D. 1400-1680
41RR236		58.60			58	Perttula 2008d	ca. A.D. 1300-1500
41RR248		4.50			157	Perttula 2008d	ca. A.D. 1400-1600
41RR290		30.00	10.00		10	Perttula 2008d	ca. A.D. 1300-1500
41BW3		2.30	30.80		302	Perttula and Nelson 2003b	ca. A.D. 1100-1600
41TT672					62	Dixon et al. 1995	ca. A.D. 1430-1600
41NA49			1.40		3431	Hart 1982	ca. A.D. 1200-1450
41HO50				1.2 [fabric impressed]	85	Jurney 2000	ca. A.D. 1400-1650
41TT653		3.80			52	Galan et al. 1997	ca. A.D. 1430-1680
41RR16		44.20			154	Skinner et al. 1969	ca. A.D. 1000-1300
41RR16		42.80	0.60		503	Skinner et al. 1969	ca. A.D. 1300-1680
44.0540		0.50		0.4 (	4254	C  4070	- A D 000 4300
41CE19		0.60		0.1 [painted] 0.1 [grooved]	1354	Creel 1979	ca. A.D. 900-1300
41DT16		5.90			17	Jurney et al. 1993	ca. A.D. 1000-1200
41MR2		7.80	4.40		2148	Davis et al. 2010	ca. A.D. 1430-1680
41UR11		3.50 7.80	1.40	4.4 feterment	858	Davis et al. 2010	ca. A.D. 1430-1680
			0.60	1.4 [stamped]	727	Davis et al. 2010	ca. A.D. 1430-1680
41MR12		7.00				Davis et al. 2010	
41MR1		7.50		0.7.5	2216	D	ca. A.D. 1430-1680
41MR1 41UR30				0.7 [grooved/fluted]	153	Perttula 2011c	ca. A.D. 900-1200
41MR1 41UR30 41TT653		4.60		0.7 [grooved/fluted]	153 1641	Perttula and Sherman 2009	ca. A.D. 900-1200 ca. A.D. 1430-1680
41MR1 41UR30 41TT653 41RK214				0.7 [grooved/fluted]	153 1641 114	Perttula and Sherman 2009 Rogers et al. 1994	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450
41MR1 41UR30 41TT653 41RK214 41RK215				0.7 [grooved/fluted]	153 1641 114 24	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450
41MR1 41UR30 41TT653 41RK214 41RK215 41RK216		4.60		0.7 [grooved/fluted]	153 1641 114 24 30	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450
41MR1 41UR30 41TT653 41RK214 41RK215 41RK216 41NA235				0.7 [grooved/fluted]	153 1641 114 24 30 195	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650
41MR1 41UR30 41TT653 41RK214 41RK215 41RK216 41NA235 41NA236		4.60		0.7 [grooved/fluted]	153 1641 114 24 30 195 146	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650
41MR1 41UR30 41TT653 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244		4.60		0.7 [grooved/fluted]	153 1641 114 24 30 195 146 68	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400
41MR1 41UR30 41TT653 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248		4.60		0.7 [grooved/fluted]	153 1641 114 24 30 195 146 68 83	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400
41MR1 41UR30 41TT653 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA264		4.60			153 1641 114 24 30 195 146 68 83 47	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400
41MR1 41UR30 41TT653 41RK214 41RK215 41RK215 41NA235 41NA236 41NA244 41NA244 41NA248 41NA264 41NA285	222	4.60		0.7 [grooved/fluted] 0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 200-1400 ca. A.D. 200-1400 ca. A.D. 200-1400 ca. A.D. 200-1400
41MR1 41UR30 41T1653 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA264 41NA264 41NA264 41NA243	2.30	4.60			153 1641 114 24 30 195 146 68 83 47 122	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650
41MR1 41UR30 41T1653 41RK214 41RK215 41NA216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA244 41NA243 41NA243 41NA243	2.30	1.00			153 1641 114 24 30 195 146 68 83 47 122 44	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1300
41MR1 41UR30 41IT653 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA244 41NA243 41NA243 41NA243 41NA243 41NA247 41CP257	2.30	1.00			153 1641 114 24 30 195 146 68 83 47 122 44 37	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 400-1650 ca. A.D. 400-1650 ca. A.D. 400-1650 ca. A.D. 400-1630 ca. A.D. 1400-1630 ca. A.D. 1400-1630
41MR1 41UR30 41IT653 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA264 41NA264 41NA243 41NA243 41NA243 41NA247 41CP257 41CP272	2.30	4.60 1.00 16.00 10.90			153 1641 114 24 30 195 146 68 83 47 122 44 37 81	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1500 ca. A.D. 1200-1500 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1430-1680
41MR1 41UR30 41IT653 41IRK214 41IRK215 41IRK216 41INA236 41INA244 41INA244 41INA244 41INA244 41INA243 41INA243 41INA243 41INA243 41INA247 41CP257 41CP272 41FK107	2.30	4.60 1.00 16.00 10.90 0.60			153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Rettula 2003b Retson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1550 ca. A.D. 1000-1200
41MR1 41UR30 41IT653 41RK214 41RK215 41RK216 41INA235 41INA236 41INA244 41INA248 41INA248 41INA248 41INA247 41I	2.30	4.60 1.00 16.00 10.90			153 1641 1114 24 30 195 146 68 83 47 122 44 37 81 92 157 22	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 2994 Perttula 2002b Relson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1630 ca. A.D. 1430-1580 ca. A.D. 1430-1580 ca. A.D. 1430-1580 ca. A.D. 1430-1500
41MR1 41UR30 41IT653 41RK214 41RK215 41RK216 41NA236 41NA244 41NA248 41NA248 41NA244 41NA243 41NA247 41NA247 41CP272 41FK107 41TF804	2.30	4.60 1.00 16.00 10.90 0.60			153 1641 1114 24 30 195 146 68 83 47 122 44 37 81 92 157 22	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Perttula and Nelson 2003b Perttula and Nelson 2002b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1400-150 ca. A.D. 1200-1400 ca. A.D. 1430-1550 ca. A.D. 1430-1550 ca. A.D. 1430-1550 ca. A.D. 1430-1550 ca. A.D. 1430-1680
41MR1 41UR30 41RK214 41RK215 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA243 41NA247 4	2.30	4.60 1.00 16.00 10.90 0.60			153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 2002b Perttula 2002b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Perton and Perttula 2003b Pertula and Nelson 2002b Pertula and Nelson 2002b Reddus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 900-1300 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41MR1 41UR30 41IT653 41IRK214 41IRK215 41IRK215 41INA236 41INA244 41INA248 41INA248 41INA244 41INA243 41INA247 41INA243 41INA247 41INA243 41INA247 41ICP257 41CP272 41FK107 41IT804 41IT310 41HS573 41HS573	2.30	1.00 1.00 16.00 10.90 0.60 4.50			153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 210	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pettula and Nelson 2002b Gadus et al. 2006 Gadus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41MR1 41UR30 41IT653 41RK214 41RK215 41RK216 41NA236 41NA248 41NA248 41NA248 41NA248 41NA248 41NA243 41NA243 41NA247 41CP272 41FK107 41TF804 41TF310 41HS573 41HS574 41HS574	2.30	1.00 16.00 10.90 0.60 4.50			153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 92 22 29 277 210 41	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pelson and Rertula 2003b Pelson and Rertula 2003b Pelson and Rertula 2003b Relson and Rertula 2003b Relson and Rertula 2003b Gadus at al. 2006 Gadus et al. 2006 Gadus et al. 2006 Gadus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680
41MR1 41UR30 41RK214 41RK215 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA243 41NA247 41NA247 41NA243 41NA247 4	2.30	4.60 1.00 16.00 10.90 0.60 4.50			153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 22 29 277 210 41 121	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pertula and Nelson 2002b Gadus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41MR1 41UR30 41T1653 41RK214 41RK215 41RK216 41NA236 41NA236 41NA244 41NA228 41NA248 41NA243 41NA243 41NA247 41CP272 41FK107 41T1804 41T1310 41H5573 41H5874 41H5844 41H5844	2.30	1.00 16.00 10.90 0.60 4.50			153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 210 41 121 168	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Pertsula and Nelson 2002b Gadus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680
41MR1 41UR30 41RK214 41RK215 41RK215 41RK215 41RA236 41NA236 41NA236 41NA244 41NA248 41NA248 41NA248 41NA247 41NA249 41NA243 41NA247 41CP257 4	2.30	4.60 1.00 16.00 10.90 0.60 4.50	0.10		153 1641 114 24 30 195 146 68 83 47 122 44 43 781 92 29 277 210 41 121 168 780	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Perton and Perttula 2003b Perton and Pertula 2003b Perton and Pertula 2003b Pertula and Nelson 2002b Gadus et al. 2006 Dockall et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41MR1 41UR30 41UR41 41UR53 41RK214 41RK215 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA243 41NA247 41CP257 41CP272 41FK107 41T1804 41T1310 41H5573 41H5574 41H5844 41H5844 41H5888 41H5588	2.30	1.00 1.00 10.90 0.60 4.50 2.40 0.80 2.40	0.10		153 1641 114 24 30 195 146 68 83 47 122 44 37 81 192 157 22 29 277 210 41 121 168 780 185	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pertula and Nelson 2002b Gadus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41MR1 41UR30 41T653 41RK214 41RK215 41RK216 41NA236 41NA244 41NA248 41NA248 41NA248 41NA243 41NA247 41CP272 41FK107 41T7810 41H5573 41H5844 41H5844 41H5884 41H5884 41H5888 41H5888		4.60 1.00 16.00 10.90 0.60 4.50		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 210 41 121 168 780 185 780	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pelson and Perttula 2003b Pelson and Perttula 2003b Pelson and Perttula 2003b Selson and Perttula 2003b Selson and Perttula 2003b Selson and Selson 2002b Gadus et al. 2006 Dockall et al. 2008 Gadus et al. 2006	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1200-1410 ca. A.D. 1300-1640 ca. A.D. 1300-1640 ca. A.D. 1200-1430 ca. A.D. 1300-1640 ca. A.D. 1200-1430 ca. A.D. 1300-1640 ca. A.D. 1300-1640 ca. A.D. 1900-1300
41MR1 41UR30 41RK214 41RK215 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA249 41FS57 41FS57 41FS57 41HS844 41HS844 41HS846 41F1425 41D711 41NA60	2.30	1.00 1.00 10.90 0.60 4.50 2.40 0.80 2.40	0.10		153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 277 210 41 121 168 780 185 154 121 121	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pertula and Nelson 2002b Gadus et al. 2006 Fertula 2008 Gadus et al. 2006 Fertula 2008 Fertula 2009 Fert	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1300-1640 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1300-1640 ca. A.D. 1200-1430
41MR1 41UR30 41T1653 41RK214 41RK215 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA243 41NA247 41CP257 41CP257 41CP272 41FK107 41T1804 41T1310 41H5573 41H5844 41H5844 41H5848 41F1425 41DF111 41NA60		1.00 1.00 10.90 0.60 4.50 2.40 0.80 2.40		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 210 41 121 168 780 185 780	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Reson and Perttula 2003b Reson and Perttula 2003b Reson and Perttula 2003b Gadus et al. 2006 Fedes et al. 2006 Gadus et al. 2006 Fedes et al. 20	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1200-1400 ca. A.D. 1300-1640 ca. A.D. 1300-1640 ca. A.D. 1200-1430 ca. A.D. 1300-1640 ca. A.D. 1900-1300
41MR1 41UR30 41T1653 41RK214 41RK215 41RK215 41RK216 41NA236 41NA236 41NA244 41NA248 41NA248 41NA248 41NA248 41NA247 41T1310 41T1804 41T1310 41H5573 41H5873 41H5844 41H5844 41H5844 41H5844 41H5844 41H5846 41T1311 41NA60 41T1372		1.00 1.00 10.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 43 73 81 92 27 27 210 29 277 210 41 121 168 780 185 154 2132 297 76	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Perton and Perttula 2003b Perton and Pertula 2006 Gadus et al. 2006 Gadus et al. 2006 Gadus et al. 2006 Gadus et al. 2006 Dockall et al. 2008 Gadus et al. 2006 Pockall et al. 2008 Fertula et al. 2010 Barnhard et al. 1994 Perttula et al. 1997	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1680-1730
41MR1 41UR30 41T1653 41RK214 41RK215 41RK215 41RK216 41NA236 41NA236 41NA244 41NA248 41NA248 41NA248 41NA248 41NA247 41T1310 41T1804 41T1310 41H5573 41H5873 41H5844 41H5844 41H5844 41H5844 41H5844 41H5846 41T1311 41NA60 41T1372		1.00 1.00 10.90 0.60 4.50 2.40 0.80 2.40		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 210 41 121 168 780 185 154 215 227 247 257 268 278 278 278 278 278 278 278 27	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Reson and Perttula 2003b Reson and Perttula 2003b Reson and Perttula 2003b Gadus et al. 2006 Fedes et al. 2006 Gadus et al. 2006 Fedes et al. 20	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1200-1400 ca. A.D. 1200-1430 ca. A.D. 1900-1300 ca. A.D. 1900-1300 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1200-1430
41MR1 41UR30 41TF653 41RK214 41RK215 41RK215 41RA236 41NA236 41NA236 41NA244 41NA248 41NA248 41NA248 41NA248 41NA247 41TF307 41TF804 41TF307 41TF804 41TF310 41TF804 41TF310 41HSS73 41HSS74 41HS844 41HS846 41HS844 41HS846		1.00 1.00 10.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 43 73 81 92 27 27 210 29 277 210 41 121 168 780 185 154 2132 297 76	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Perton and Perttula 2003b Perton and Pertula 2006 Gadus et al. 2006 Gadus et al. 2006 Gadus et al. 2006 Gadus et al. 2006 Dockall et al. 2008 Gadus et al. 2006 Pockall et al. 2008 Fertula et al. 2010 Barnhard et al. 1994 Perttula et al. 1997	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1560-1330 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1680-1730
41MR1 41UR30 41IT1653 41RK214 41RK215 41RK215 41RK216 41NA236 41NA236 41NA248 41NA248 41NA248 41NA248 41NA247 41CP257 41CP272 41CP272 41T1804 41T1310 41HS573 41HS573 41HS584 41HS844 41HS846 41HS588 41F4125 41CP354 41CP357 41CP372 41CP373 41HS574 41HS846 41HS858 41F4125 41CP354 41CP354 41CP354 41CP354 41CP354 41CP355		4.60 1.00 16.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 195 157 22 29 277 210 41 121 168 780 185 155 168 780 179 180 180 180 180 180 180 180 180	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Perttula and Nelson 2002b Gadus et al. 2006 Fedes et al. 1994b Perttula et al. 1994 Perttula and Nelson 2007a Perttula and Nelson 2007a Perttula and Nelson 2007a	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1680-1730
41MR1 41UR30 41UR30 41RK214 41RK215 41RK215 41RK216 41NA236 41NA236 41NA244 41NA248 41NA248 41NA248 41NA247 41T321 41CP257 41CP272 41FK107 41T1804 41T1310 41H5573 41H5574 41H5584 41H5844 41H5884 41H5888 41H48884 41H48888 41H488888 41H488888 41H4888888 41H48888888888		4.60 1.00 1.00 16.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80		0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 210 41 121 168 780 185 185 184 185 185 185 185 185 185 185 185	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Perton and Perttula 2003b Perton and Nelson 2002b Gadus et al. 2006 Pertula and Nelson 2007a Perttula and Holfrichter 1968 Lorrain and Hoffrichter 1968	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1200-1400 ca. A.D. 1680-1730
41MR1 41UR30 41UR31 41R4214 41R4215 41R4215 41R4215 41R4216 41NA236 41NA244 41NA248 41NA248 41NA243 41NA244 41NA243 41NA243 41NA243 41NA243 41NA243 41H5573 41H5874 41H5874 41H5884		4.60 1.00 1.00 16.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80 0.20 10.50 50.90	0.10	0.8 [Lip notched]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 92 157 22 29 277 71 168 780 185 154 213 22 27 76 41 121 168 168 17 17 18 19 19 19 19 19 19 19 19 19 19	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Nelson and Perttula 2003b Pertula a1006 Gadus et al. 2006 Fadus et al. 2006 Fadu	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1680-1730 ca. A.D. 1680-1740-1740
41MR1 41UR30 41RK214 41RK215 41RK215 41RK215 41RA236 41NA236 41NA236 41NA244 41NA248 41NA248 41NA248 41NA248 41NA249 41CP257 4		4.60 1.00 1.00 16.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80 0.20 10.50 50.90	0.10	0.8 [Lip notched]	153 1641 114 24 30 30 195 146 68 83 47 122 44 47 122 29 277 210 29 277 210 168 185 185 185 185 185 185 185 18	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Pertula 2006 Gadus et al. 2006 Fertula and Nelson 2007a Perttula et al. 1997 Perttula end Nelson 2007a Perttula and Nelson 2007a Perttula and Nelson 2007a Perttula et al. 1995 Perttula et al. 1995 Perttula end Nelson 2007b Perttula end Nelson 2007b Perttula end Nelson 2007b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1680-1730 ca. A.D. 1200-1400 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1200-1400 ca. A.D. 100-1200 ca. A.D. 100-1200 ca. A.D. 1680-1730
41MR1 41UR30 41UR41 41UR53 41RK214 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA248 41NA249 41NA249 41NA257 41CP272 41FK107 41CP272 41FK107 41CP373 41HS574 41HS844 41HS846 41HS578 41HS846 41HS866 41HS866 41HS8666 41HS86666 41HS8666666666666666666666666666666666666	0.90	4.60 1.00 1.00 16.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80 0.20 10.50 50.90	0.10	0.8 [Lip notched] 2.4 [grooved]	153 1641 114 24 30 195 146 68 83 47 122 44 37 81 192 157 22 29 277 210 41 121 168 780 185 154 155 29 277 76 47 41 121 122 44 41 121 123 124 125 127 127 128 129 129 129 129 129 129 129 129	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Pertula and Nelson 2002b Gadus et al. 2006 Fadus et al. 2006 Fadus et al. 2006 Fadus et al. 2006 Fadus et al. 2006 Cadus et al. 2006 Cadus et al. 2006 Fadus et al. 2006 Fadus et al. 2007 Fertula and Nelson 2007a Perttula and Nelson 2007a Lorrain and Hoffrichter 1968 Brewington et al. 1995 Perttula and Nelson 2007b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1430-1680 ca. A.D. 1400-1430 ca. A.D. 1680-1730
41MR1 41UR30 41RK214 41RK215 41RK215 41RK216 41NA235 41NA236 41NA244 41NA248 41NA248 41NA248 41NA248 41NA249 41F8107 4		4.60 1.00 1.00 16.00 10.90 0.60 4.50 2.40 0.80 2.40 7.80 0.20 10.50 50.90	0.10	0.8 [Lip notched]	153 1641 114 24 30 30 195 146 68 83 47 122 44 47 122 29 277 210 29 277 210 168 185 185 185 185 185 185 185 18	Perttula and Sherman 2009 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Rogers et al. 1994 Perttula 2002b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Relson and Perttula 2003b Pertula 2006 Gadus et al. 2006 Fertula and Nelson 2007a Perttula et al. 1997 Perttula end Nelson 2007a Perttula and Nelson 2007a Perttula and Nelson 2007a Perttula et al. 1995 Perttula et al. 1995 Perttula end Nelson 2007b Perttula end Nelson 2007b Perttula end Nelson 2007b	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1450 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1400-1650 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1200-1400 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1680-1730 ca. A.D. 1200-1400 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1200-1400 ca. A.D. 100-1200 ca. A.D. 100-1200 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	l Fred-oxidized	Rfdirect	Rfinverted	Rfeverted	Lfrounde	d Lfflat	Lfrounded-fold	ed Lfbeveled	Pred	Pwhite	DMUWappliqued
41NA336	92.40	1.50		4.50	1.50	21.50	12.30	9.20	56.90										0.10
41CS14 41SM273, Block I	89.90 61.80	1.20 12.40		7.00 19.10	1.90 6.80	21.50	9.70	19.90	49.00	100.00			31.60	68.40					7.00
41SM273, Bl. III 41SM273, Bl. II	70.20 68.70	14.90 13.70		11.30 13.70	3.60 3.90	22.00 19.30	14.60 12.50	17.40 24.80	45.90 43.40	94.40 96.60	5.60 3.40		57.80 37.90	35.50 55.20	4.40 6.90	2.20	0.90		0.30
41TT396	81.90			14.10	4.00														4.00
41TT400 41DT6	72.40 53.40	4.30 5.40	2.10	14.30 38.60	9.00					20.00	400	40.00	47.60	38.10	9.50				1.00
41DT16 41TT769	58.40 26.30	12.70	1.20 1.30	25.00 72.50		6.80	18.40	17.80	57.00	28.60	21.40	50.00	52.40	23.80					8.80
41TT13		4.50															11.50		
41BW600 41HO211	98.50 77.40	1.50 11.80		9.70	3.20	14.10	13.00	12.00	54.30								6.70		20.00
41HO214 41SM272	74.00 97.10	12.30		11.50 2.90	2.20	20.70	7.70	13.50	56.30										0.60
41CP314																			3.00
41CP317 41CP304	95.00			5.00		5.00	26.00	9.00	60.00										2.30 0.90
41CP315 41SM272	89.00 76.00	8.00		10.00 12.00	1.00														
41SM273					45.00														1.20
41SY100 16SA101	52.20 40.10	2.00 5.80			45.80 54.00														
16SA17 16SA204	39.00 76.20	12.90	0.40	23.50	48.10														0.70 1.10
16SA62																			0.30
16SA30B 16SA37B																			1.00 0.30
16SA37A 16SA30A																			8.00
41TT110																			0.60
41UR1 41UR3																			3.50 2.00
41UR13 41UR14																			
41UR18																			0.70
41WD16 41CP8																			1.90
41CP14 41FK4																			1.00 20.70
41MX6 41MX8																			3.90
41TT4																			3.10
41TT6 41TT17																			4.30 0.80
41TT28 41TT52																			1.50
41CP15																			2.60
41HS1 41HS10																			16.70
41HS11 41MR6																			0.90
41MR13 41MR31																			7.30
41MX22																			14.30
41TT18 41TT151																			7.00 3.40
41UR15 41CP3			1.30																
41CP71			1.50																1.10
41CP55	97.80	2.20																	6.20
41LR2 41GG5	85.50 91.80	8.60 8.20	5.90																5.60
41GG50 41BW3, VP 1	89.40 85.70	10.60 1.40	2.40	10.00		19.20	15.10	15.50	46.40										11.80
41BW4	97.20	2.80	2.40	10.00		15.20	15.10	15.50	40.40								0.40	3.70	6.00
41RK19	88.70	11.30															0.10 0.70		0.50
41BW2 41TT12	84.90 76.40	9.40 23.60	5.70							72.90	7.40	19.70	77.70	1.60	20.70			1.50	6.40 2.00
41TT11	72.70	27.30															1.40		0.60
41NA317 41CE299	78.00 79.90	4.20 4.20		16.40 9.20	1.40 6.80	2.80 27.20	8.30 16.70	20.80 10.30	68.00 46.00										0.60
41SM404 41RK240	92.00 72.10	8.00		16.50	12.60	9.30	15.80	16.30	58.60	93.10	4.30	2.60	74.10	16.40	6.00	0.90	0.90 1.10		
41RK242	76.80	0.70		14.70	7.70					00.00		42.00	70.00	24.00					
41RK243 41UR106	74.60			10.40	13.60					88.00		12.00	79.00	21.00					0.80
41UR106B 41UR109																			0.90
41UR118 41UR129																			0.20
41UR133, Saddle																			1.90
41LR297 41SY323	62.50 11.90	14.80 69.50		21.60 18.60		23.50 13.60	12.30 5.10	8.00 15.30	56.20 64.40										1.10
41RK557 41HS269	42.90	31.80		24.30	1.10														
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 41CP408	58.10 40.60	8.70 4.40	0.20	31.70 54.20	1.50 0.50	14.70 25.20	8.10 13.40	18.50 19.90	52.40 41.10	91.70 92.20	8.30	7.80	74.50 66.30	23.00 15.70	2.50 16.80	1.10			1.90
41AN21 41CE39	94.30 94.60	0.80	4.10	4.30	1.10	12.70 11.40	30.90 22.90	40.00 14.90	16.40 50.90	37.50	18.80	43.80	83.30	16.70					1.60
41NA321		1.00																	00
41CE20 41CE48	85.70 69.90	1.60 9.70		12.70 19.70	0.80	13.70 15.20	17.60 18.50	24.40 9.80	44.40 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.

March   100	Trinomial	DMUWappliqued-brushed	DMUWappliqued-incised	DMUWappliqued-punctat	ed DMUWbrushed D	MUWbrushed-incised	DMUWbrushed-punctated	DMUWbrushed-applique	ed DMUWincised DN	//UWincised-punctate
MEMORY   1	41NA336				89.20	1.00	1.00		3.00	0.10
MANUFACE   1988   1989   198										
CHANTE							2.10			
SETUING SETUIN										
Part							1.20			8.00
MITH   1988						2.20				1.00
1000   1000				4.70	23.30					
STITUS				****	5.80					
SHINNON							2.20	1.10		
SHEPAIL										
SHEADLY   1-10										
MINOR   100   10										1.40
Minument		1.70				14.00	2.30		7.00	
MICHINE   120										4.80
MINOR			4.50	0.00				2.40	0.50	2.40
SCOPE			1.50					3.10		
WELLOW   W				1.00						1.00
SEMPLY   1.00							13.30			
1819000								1.20		12.80
1504174   1504   1406										
15602561										
1500.05										
186.08	16SA204									
1864379		0.04	0.10			0.02	0.10			0.40
156373						4.50				4.00
1868.086						1.50				4.60
## 1										
4LURIS							0.50	0.30		2.80
MUMBA							0.30	5.50		
STATE						4.40	2.30			
STATE	41UR14									0.90
14079   1208	41UR18		0.10		67.20	5.10	3.60		4.40	
14174    1				1.40				0.70		
ABMOR			0.10				1.50			1.50
SAMPO						0.60				
Second   S				2.40				1.80		
14174   9.80   35.70   3.90   2.30   3.90   2.30   3.80   7.00   0.80   7.00   0.80   7.00   0.80   7.00   0.80   7.00   0.80   7.00   0.80   7.00						1 20				1 20
14176				0.80				0.80		
MITTION   DECOME   150				0.80		3.50	2.30			0.80
141728			0.80				1.50			1.50
14T52										
4HS10						1.70	5.20	1.70		0.60
Section   Sect	41CP15				17.90	2.60			33.30	
Section   Sect	41HS1				57.40					1.90
44M66										
44MR3							3.60	6.70		
Second   S						3.00				
STOTE   STOT										
STITES						2.00				2.00
AUTUS										2.00
41UR15						41.70				
44CP3						5.20	1.70			
44.071								2.10		2.10
ALIRIZ	41CP71		0.50			4.80	2.30	1.40		1.40
ALGGS	41CP55				53.80	9.20			6.20	
ALGGS										
ALGOSO										5.60
ALBWAY   1										
ALBWA		0.00				1.50	9.50			1.20
41RK19			0.40	1 10			1 90			
ALBWZ		0.70		1.10				0.60		
110   0.30			0.03		55.00	5.50	1.50	5.00	27.10	10.00
1112	41BW2		1.20	0.10	8.60	0.20	0.60	1.30	14.70	0.70
41T11							**			
41CE299 41CE289 4100 4100 4100 4100 4100 4100 4100 410	41TT11			0.20	10.80	1.80		0.20	30.50	
415M040							6.00			
41RK240								0.60		
41RK242										
41RK243						0.50				
41UR106				0.40		2.20		9.00		
41UR106B 0.50 4.50 1.10 1.10 1.10 1.10 1.10 3.30 3.30 1.101 1.10 1.10				0.40		5.20				
41UR119 0.30 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 0.40 7.10 0.20 41UR129 2.40 0.30 4.10 2.40 41UR129 2.40 0.30 4.10 2.40 41UR13,3 saddle 41LR297 2.40 0.30 4.10 2.40 41UR129 2.40 41UR1297 3.70 2.50 41UR1297 3.70 2.50 41UR1297 3.70 2.50 41UR1297 3.70 2.40 41UR1297 3.70 2.50 41UR1297 3.70 2.40 41UR1297 3.70 3.70 4.40 3.70 3.70 4.40 3.70 3.70 3.70 41UR1297 3.70 3.70 3.70 3.70 3.70 3.70 3.70 3.7			0.50			1.10				
4141118				0.30				0.90		
41UR1329			0.50							
41UR133, Saddle     1.00     1.90     1.90     1.70     20.50       41R297     64.80     2.30     1.20     12.0     28.90       41R557     49.10     1.20     1.20     28.90     1.20     28.90       41R15269     64.30     59.10     5.60     0.60     0.30     18.10     1.10       41R512     1.00     0.30     18.40     3.00     1.00     0.10     23.50     5.40       41R412     0.70     72.80     1.40     1.40     2.70     0.70       41K623     1.60     1.60     1.40     2.70     0.70       41K1321     78.60     2.10     1.60     1.60     3.40       41K2620     70.70     4.40     5.50     1.60     1.70     1.10       41K263     74.70     0.50     1.00     1.60     1.70     1.10										
41R297 41SY323 41SY323 41SY323 41SY323 41SY323 41SY323 41SY323 41SY326 49.10 49.10 49.10 49.10 49.10 41SY326 4						1.90				
41R1557 49.10 1.20 28.90 41R15269 64.30 9.50 9.50 9.50 11R10 1.20 9.50 9.50 11R10 1.10 1.10 1.10 1.10 1.10 1.10 1.									45.40	9.10
41HS259	41SY323					2.30			14.80	
41PN175     0.40     59.10     5.60     0.60     0.30     18.10     1.10       41LF12     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     1.00	41RK557				49.10		1.20	1.20	28.90	
41H512										
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			0.40		59.10	5.60	0.60	0.30		
41AN21 0.70 72.80 1.40 1.40 2.70 0.70 41CE39 65.30 1.60 9,70 2.40 41N3321 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			0.22		46.00	2.65				
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						3.00				
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			0.70			1.00	1.40	1.40		
41CE20     70.90     4.40     5.50     1.60     1.70     1.10       41CE48     74.70     0.50     1.00     9.30										2.40
41CE48 74.70 0.50 1.00 9.30							5 50	1 60		1 10
								1.00		1.10
	41CE48 41CE293				81.50	1.90	1.30		0.60	1.00

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

	DINO WHELK DANGE	. Diviovopinchea D	vertooi punctated 1	OMUWfingernail punctated	2 vicirculai punctated	z.viovvcane punctate	Diviovvilaged	Dim engi-punet.		
11NA336			3.00	0.50	0.50				16.20	
ICS14	4.50		0.50	0.50	0.50				30.20	
SM273, Block I			21.10	3.20		2.10			16.80	
SM273, Bl. III			11.10	5.20		2.30			10.50	
SM273, Bl. II			28.20	9.80		4.30		0.60	11.00	
TT396			4.30	4.30				2.20	17.40	
TT400			6.10	14.20				1.00	12.20	
DT6		1.60	14.10	4.70					29.70	
DT16		1.00	1.00	20.40					30.00	
TT769	11.00		17.60	1.10					13.20	
TT13	1.90		5.80	1.90					76.00	
BW600	6.70								53.30	
HO211	1.40								14.30	
HO214	2.90		2.90	0.60					9.30	
SM272			4.80						14.30	
CP314	9.10			18.20					18.20	
CP317	0.80		3.90	4.70					21.70	
CP304	0.90		4.50						23.30	
CP315									30.00	
SM272									7.40	
SM273									17.40	
SY100									7.40	
SA101							0.50		5.70	
SA17		0.04					0.60		4.20	
SA204		0.01					35.10		12.00	
SA62							8.00	0.02	52.00	
SA30B							15.40		20.90	
SA37B							4.00		19.10	
SA37A									26.40	
SA30A							1.50		8.40	
TT110	1.40			0.20					6.80	
UR1		0.50		3.00					31.70	
UR3		0.10		1.00					14.10	
UR13				1.60					5.90	
UR14		0.70	0.70						7.10	
UR18	c ==			0.80					12.70	
WD16	0.70	0.77		4.10					44.80	
CP8	0.30	0.30							22.30	
CP14		6.90							26.00	
FK4	0.60	1.80		2.40					44.50	
MX6									35.20	
MX8		0.70		4.60			0.70		16.40	
TT4				6.20					28.70	
TT6				10.60					45.70	
TT17		0.80		6.80					16.70	
ITT28	0.30								28.80	
ITT52		2.60		0.60					13.90	
ICP15	4.00	2.60							2.60	
LHS1	1.90								11.10	
IHS10	1.90								11.30	
1HS11							0.30		6.90	
LMR6				4.50					10.40	
IMR13		2.40							17.10	
MR31	2.20			8.70			2.20		13.00	
.MX22	2.00								24.50	
TT18				2.30					14.00	
TT151									19.00	
UR15									10.30	
.CP3				2.10					36.20	
CP71	0.40		3.70						19.10	
.CP55	3.10								21.50	
LR2			22.20	5.60					16.70	
3G5			14.00	2.00					48.00	
GG50		4.80	4.80					4.80	28.60	
BW3, VP 1	1.80							2.10	27.10	
BW4			6.70	6.00				0.70	29.90	0.40
RK19		1.40	2.00	0.30	0.50				8.60	
BW2	1.00		3.10	0.70				0.10	49.30	0.30
TT12	0.90		9.40	31.00	2.30	0.30		0.30	12.80	
TT11	0.20	0.40	11.20	5.10	0.60	0.20			17.30	
NA317			4.00	4.00					6.00	
CE299			10.40	0.60		0.60			14.90	
SM404		0.20	14.30	2.20				4.50	16.50	
RK240		3.70	9.60	7.00		1.10			12.80	
LRK242			12.80	19.20		1.30			18.00	
LRK243			11.10	24.30		0.70			27.90	
IUR106		3.20							12.40	
UR106B									20.20	
UR109									20.40	
UR118	0.20	0.20		0.20					19.50	
UR129									16.30	
UR133, Saddle									22.40	
LR297				12.50	1.10	1.10			30.70	
			1.10				4.50		5.70	
		1.20	1.80	8.00			0.60		8.00	
SY323									23.80	
SY323 RK557			1.90	0.30	0.10				5.80	
SY323 RK557 HS269		1.10	4.10	6.60					6.30	
SY323 RK557 HS269 PN175					0.70	0.70				
SY323 RK557 HS269 PN175 HS12			8.00						18.90	
SY323 RK557 HS269 PN175 HS12 CP408	2.00	0.80	8.00	8.50	0.70	0.70			18.90 13.60	
SY323 RK557 HS269 PN175 HS12 CP408 AN21	2.00		8.00	8.30	0.70	0.70			13.60	
LSY323 LRK557 LHS269 LPN175 LHS12 LCP408 LAN21 LCE39	2.00 0.80	0.80 1.40	8.00	8.50	0.70	0.70			13.60 11.30	
SY323 RK557 HS269 PN175 HS12 CP408 AN21 CE39 NA321	0.80	0.80	8.00	8.50	0.70	0.70			13.60 11.30 7.90	
LSY323 LRK557 LHS269 LPN175 LHS12 LCP408 LAN21		0.80 1.40	8.00	8.30	0.70	0.70			13.60 11.30	

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

Trinomial  41NA336 41CS14 41SM273, Block I 41SM273, Bl. III 41SM273, Bl. III 41SM273, Bl. III 41TT396 41TT130 41DT16 41DT16 41TT769 41TT13 41BW600 41H0211 41H0211 41H0214 41SM272 41CP317 41CP317 41CP317 41CP317 41CP317 41CP317 16SA204 16SA3101 16SA3101 16SA37B 16SA37B	DMFWengraved-brushed	2.00 4.20 0.60 1.20 6.50 8.20 14.10 13.60 18.70 1.90	DMFWtrailed 0.30	Other decorative method  1.0 [stamped]	198 202 95 342 163 163 163 163 175 175 175 175 175 175 175 175 175 175	Reference  Perttula et al. 2011c Perttula 1998 Perttula and Nelson 2004b Perttula and Nelson 2004b Perttula and Nelson 2004b Nash et al. 1995 Fields et al. 1993 Fields et al. 1993 Fields et al. 1993 Giffer al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 1999	ca. A.D. 1680-1730 ca. A.D. 1200-1400 ca. A.D. 12200-1400 ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1430-1680 ca. A.D. 1000-1200 ca. A.D. 1000-1400 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1440-1650 ca. A.D. 1440-1650
41C514 41SM273, Block I 41SM273, Bl. III 41SM273, Bl. III 41SM273, Bl. III 41T396 41T7400 41D716 41D716 41D716 41T713 41BW600 41H0211 41H0214 41SM272 41CP317 41CP317 41CP317 41CP317 41CP316 41SM272 41SM272 41SM272 41SM272 41SM272 41SM273		4.20 0.60 1.20 6.50 8.20 14.10 13.60 18.70 1.90	0.30	1.0 [stamped]	202 95 342 163 46 98 64 103 91 52 15 70 172 21 33 129	Perttula 1998 Perttula and Nelson 2004b Perttula and Nelson 2004b Perttula and Nelson 2004b Nash et al. 1995 Nash et al. 1995 Fields et al. 1993 Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1200-1400 ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 1343-1680 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1808-1730 ca. A.D. 1400-1650 ca. A.D. 14330-1680
41SM273, Block I 41SM273, Bl. III 41SM273, Bl. III 41SM273, Bl. III 41T1396 41DT16 41DT16 41DT16 41T1769 41T173 41BW600 41H0211 41H0211 41H0214 41SM272 41CP314 41CP317 41CP304 41CP317 41CP304 41CP315 41SM273 41SY100 16SA17 16SA17 16SA21 16SA27 16SA204 16SA62 16SA308		4.20 0.60 1.20 6.50 8.20 14.10 13.60 18.70 1.90	0.30	1.0 [stamped]	95 342 163 46 98 64 103 91 52 15 70 172 21 33 129	Perttula 1998 Perttula and Nelson 2004b Perttula and Nelson 2004b Perttula and Nelson 2004b Nash et al. 1995 Nash et al. 1995 Fields et al. 1993 Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1000-1500 ca. A.D. 1200-1450 ca. A.D. 1430-1680 ca. A.D. 1880-1730 ca. A.D. 1680-1730 ca. A.D. 1400-16550 ca. A.D. 1430-1680
41SM273, Bl. III 41SM273, Bl. III 41TT396 41TT400 41DT16 41DT16 41TT13 41BW600 41HT011 41H0211 41H0211 41H0214 41CP314 41CP314 41CP314 41CP317 41CP317 41CP315 41SM272 41SM272 41SM273 41SY100 16SA17 16SA17 16SA204 16SA308		0.60 1.20 6.50 8.20 14.10 13.60 18.70 1.90	0.30	1.0 [stamped]	342 163 46 98 64 103 91 52 15 70 172 21 33 129	Perttula and Nelson 2004b Perttula and Nelson 2004b Nash et al. 1995 Nash et al. 1995 Fields et al. 1993 Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 900-1200 ca. A.D. 1900-1200 ca. A.D. 1433-1680 ca. A.D. 1200-1430 ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1200-1450 ca. A.D. 1430-1680 ca. A.D. 1880-1730 ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41SM273, Bl. II 41T396 41T7396 41T7400 41D716 41D716 41D716 41T713 41BW600 41H0211 41H0214 41SM272 41CP317 41CP317 41CP317 41CP316 41SW272 41SW372 41SW372 41SW372 41SW373 41S		1.20 6.50 8.20 14.10 13.60 18.70 1.90	0.30	1.0 [stamped]	163 46 98 64 103 91 52 15 70 172 21 33 129	Perttula and Nelson 2004b Nash et al. 1995 Nash et al. 1995 Fields et al. 1993 Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 900-1200 ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1200-1430 ca. A.D. 1000-1200 ca. A.D. 1200-1450 ca. A.D. 1240-1450 ca. A.D. 1430-1680 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41TT396 41TT400 41DT6 41DT16 41TT769 41TT13 41BW600 41H0211 41H0211 41H0214 41SM272 41CP314 41CP317 41CP304 41CP315 41SM272 41SM272 41SM272 41SM272 41SM273 41SM100 16SA101 16SA101 16SA204 16SA204 16SA308 16SA308		6.50 8.20 14.10 13.60 18.70 1.90		1.0 [stamped]	46 98 64 103 91 52 15 70 172 21 33 129	Nash et al. 1995 Nash et al. 1995 Fields et al. 1993 Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1430-1680 ca. A.D. 1200-1430 ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1200-1400 Ca. A.D. 1680-1730 Ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1400-1650 ca. A.D. 1430-1680
410T6 410T16 410T16 410T16 410T16 411T13 4180W600 41H0211 41H0214 41SM272 41CP317 41CP317 41CP304 41CP315 41SM272 41SM272 41SM272 41SM272 41SM273 41SM273 41SY100 16SA101 16SA201 16SA201 16SA308 16SA308		14.10 13.60 18.70 1.90 12.10 6.20 8.00 6.70 3.70		1.0 [stamped]	64 103 91 52 15 70 172 21 33 129	Fields et al. 1993 Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1000-1200 ca. A.D. 1000-1200 ca. A.D. 1200-1450 ca. A.D. 1200-1450 ca. A.D. 1430-1680 ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1440-1650
41DT16 41TT169 41TT13 41BW600 41H0211 41H0211 41H0214 41CP314 41CP314 41CP314 41CP314 41CP315 41SW272 41SW272 41SW272 41SW273 41SY100 16SA17 16SA204 16SA204 16SA308 16SA308		13.60 18.70 1.90 12.10 6.20 8.00 6.70 3.70			103 91 52 15 70 172 21 33 129	Fields et al. 1993 Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1000-1200 ca. A.D. 1200-1450 ca. A.D. 1430-1680 ca. A.D. 1200-1400 Ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41TT769 41TT13 41BW600 41H0211 41H0214 41SM272 41CP317 41CP317 41CP315 41SM272 41SM272 41SM272 41SM273 41SM273 41SM201 16SA101 16SA101 16SA204 16SA308 16SA308		18.70 1.90 12.10 6.20 8.00 6.70 3.70			91 52 15 70 172 21 33 129	Walters et al. 2003 Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1200-1450 ca. A.D. 1430-1680 ca. A.D. 1200-1400 Ca. A.D. 1680-1730 ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41TT13 41BW600 41H0211 41H0211 41H0214 41SM272 41CP314 41CP317 41CP304 41CP315 41SM272 41SM272 41SM272 41SM273 41SY100 16SA101 16SA101 16SA217 16SA204 16SA62 16SA308 16SA378		1.90 12.10 6.20 8.00 6.70 3.70			52 15 70 172 21 33 129	Bell 1981 Cliff et al. 1997 Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1430-1680 ca. A.D. 1200-1400 Ca. A.D. 1680-1730 Ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41H0211 41H0214 41SM272 41CP314 41CP317 41CP304 41CP315 41SM272 41SM272 41SM272 41SM273 41SY100 16SA101 16SA101 16SA204 16SA62 16SA308 16SA37B		6.20 8.00 6.70 3.70			70 172 21 33 129	Perttula and Nelson 2006b Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	Ca. A.D. 1680-1730 Ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41H0214 41SM272 41CP314 41CP317 41CP304 41CP315 41SM272 41SM273 41SY100 16SA101 16SA101 16SA204 16SA204 16SA30B 16SA30B		6.20 8.00 6.70 3.70			172 21 33 129	Perttula and Nelson 2006b Perttula and Nelson 2000a Perttula and Nelson 1999	Ca. A.D. 1680-1730 ca. A.D. 1400-1650 ca. A.D. 1430-1680
41SM272 41CP314 41CP317 41CP304 41CP315 41SM272 41SM272 41SM272 41SM273 65A101 16SA101 16SA204 16SA204 16SA308 16SA37B		6.20 8.00 6.70 3.70			21 33 129	Perttula and Nelson 2000a Perttula and Nelson 1999	ca. A.D. 1400-1650 ca. A.D. 1430-1680
41CP314 41CP317 41CP304 41CP315 41SM272 41SM273 41SY100 16SA101 16SA17 16SA204 16SA62 16SA308 16SA37B		6.20 8.00 6.70 3.70			33 129	Perttula and Nelson 1999	ca. A.D. 1430-1680
41CP304 41CP315 41SM272 41SM273 41SY100 16SA101 16SA17 16SA204 16SA62 16SA30B 16SA37B		8.00 6.70 3.70				Portfula and Nolcon 1000	
41CP315 41SM272 41SM273 41SY100 16SA101 16SA17 16SA204 16SA62 16SA30B 16SA37B		6.70 3.70				Perttula and Nelson 1999	ca. A.D. 1430-1680
41SM272 41SM273 41SY100 16SA101 16SA17 16SA204 16SA62 16SA30B 16SA37B		3.70			112 30	Perttula and Nelson 1998 Perttula and Nelson 1998	ca. A.D. 1430-1680 ca. A.D. 1430-1680
41SM273 41SY100 16SA101 16SA201 16SA204 16SA62 16SA30B 16SA37B					27	Perttula and Nelson 2001	ca. A.D. 1400-1650
16SA101 16SA17 16SA204 16SA62 16SA30B 16SA37B					86	Perttula and Nelson 2001	ca. A.D. 900-1200
16SA17 16SA204 16SA62 16SA30B 16SA37B					27	Benham et al. 1973	ca. A.D. 1000-1200
16SA204 16SA62 16SA30B 16SA37B					296	Benham et al. 1973	ca. A.D. 1000-1200
16SA62 16SA30B 16SA37B			1.50		2298 1498	Benham et al. 1973 Kelley 2006	ca. A.D. 1400-1680 ca. A.D. 1500-1600
16SA37B				0.02 [lip notched]	4871	Woodall 1969	ca. A.D. 1400-1680
					1263	Woodall 1969	ca. A.D. 1400-1680
103A37A			0.20	0.1 [stamped]	1210 451	McClurkan et al. 1966 McClurkan et al. 1966	ca. A.D. 1400-1680 ca. A.D. 1400-1680
16SA30A					131	McClurkan et al. 1966	ca. A.D. 1400-1680
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		298 122	Thurmond 1990 Thurmond 1990	ca. A.D. 1430-1680 ca. A.D. 1430-1680
41UR13 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 41CP14		2.20			1565 624	Thurmond 1990 Thurmond 1990	ca. A.D. 1430-1680
41CF14 41FK4		4.30			164	Thurmond 1990 Thurmond 1990	ca. A.D. 1200-1430 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 41TT6		3.10 4.30			129 94	Thurmond 1990 Thurmond 1990	ca. A.D. 1430-1680 ca. A.D. 1200-1430
41TT17		6.10	0.80		132	Thurmond 1990	ca. A.D. 1200-1430 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 41HS10		1.90			54 53	Thurmond 1990 Thurmond 1990	ca. A.D. 1430-1680 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 41MR31		2.20			41 46	Thurmond 1990 Thurmond 1990	ca. A.D. 1430-1680 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 41CP3		4.30			58 94	Thurmond 1990 Thurmond 1990	ca. A.D. 1430-1680 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		22.20			50	Perttula et al. 20140 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 0.10	6.00	0.05 [stemmed]	268 2096	Perttula 2014c Perttula 2014d	ca. A.D. 1200-1500
41RK19		0.10		0.05 [stamped] 0.1 [li[ notched]; 0.2	2090	Perttula 20140	ca. A.D. 1200-1430
41BW2		2.00	1.00	[rough]	1223	Perttula 2014e	ca. A.D. 1500-1700
41TT12		3.10			352	Perttula 2014f	ca. A.D. 900-1200
41TT11 41NA317		11.20			509	Perttula 2014f	ca. A.D. 1200-1430
41CE299					50 154	Perttula 2013h Perttula and Nelson 2000b	ca. A.D. 1680-1730 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 41UR106		6.30			280 380	Sherman 2001 Parsons 2011	ca. A.D. 1200-1400 ca. A.D. 1430-1680
41UR106B		1.60		0.5 [painted]	183	Parsons 2011 Parsons 2011	ca. A.D. 1430-1680 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 41UR133, Saddle		2.00			295 161	Parsons 2011 Parsons 2011	ca. A.D. 1430-1680 ca. A.D. 1200-1430
41LR297					88	Perttula 2009g	ca. A.D. 1200-1430
41SY323		2.30			88	Perttula 2010c	ca. A.D. 1500-1680
41RK557					163	Dockall and Fields 2011	ca. A.D. 1300-1600
41HS269		0.20		0.1 [lin patabod]	42	Griffith et al. 2012	ca. A.D. 1430-1680
41PN175 41HS12		0.20 1.40		0.1 [lip notched]	1798 558	Perttula 2014g Goode et al. 2014	ca. A.D. 1300-1500 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 41CE20					89 182	Marceaux 2011 Marceaux 2011	ca. A.D. 1680-1730 ca. A.D. 1680-1730
41CE48					194	Marceaux 2011 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	Lfrounded	Lfflat	Lfrounded-folded Lfbeveled	Pred	Pwhite	DMUWapplique
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	DMUWappliqued-brushed	DMUWappliqued-incised	DMUWappliqued-punctate	d DMUWbrushed DI	MUWbrushed-incised	DMUWbrushed-punctated D	MUWbrushed-applique	ed DMUWincised DI	MUWincised-pund
11AG22				87.70	0.60	1.80	0.60	1.20	1.20
11CE62				90.50				5.40	
1NA6			0.10	78.80	1.60	2.10	0.70	4.30	0.30
INA15				60.50	2.20	3.20	1.60	2.70	0.50
INA44	1.40		0.60	55.70	5.80	5.10		7.20	1.90
INA54	1.10			72.00	8.50	3.20		5.80	0.50
NA21			0.03	68.90	0.30	0.40		6.90	0.20
NA22	3.80	0.03	0.70	77.40	1.60	3.60		3.40	0.10
INA23	0.80		0.70	76.90	1.00	1.90		6.30	0.70
INA111	1.90		0.90	79.70	1.90	2.30		1.40	
INA183			1.30	58.00	1.70	1.30		10.90	3.40
INA206	0.50		0.20	52.60	2.80	0.60		12.30	1.40
NA67				16.20		1.00		24.80	10.00
SA94	0.60			46.00	1.00	2.60		12.60	5.00
SA25		0.10		0.60	0.10			35.60	0.80
BW3, Mound				12.40				36.60	
SA25								29.10	3.40
WD577			5.00	1.00	1.00	2.00		21.80	6.00
SY43		0.10		66.30	3.00	1.80	1.00	9.00	0.60
SY279		1.10		52.80			2.20	20.90	1.10
LSY280				55.70	6.30	0.40		17.30	0.30
LR2				1.20				15.00	
SY41				45.20	3.20	6.50		9.00	9.50
SY45				62.70	5.90	4.90		8.60	3.20
SY27				87.20		0.80	0.80	1.70	
LR2, NMNH			0.40	0.40				10.90	1.50
GG69		0.20		13.30	3.50	1.80		24.40	21.90
IFN1				3.60				28.60	
ILR1		0.30	0.60	3.90	0.60	0.30		31.90	1.40
.WD3				21.10	8.80		4.10	2.90	
TT851			0.70	11.50		0.50	0.20	18.10	2.70
TT852		0.30	0.70	32.60		1.50	0.70	17.70	2.50
TT853		0.10	0.40	43.20		2.70	2.50	15.00	4.60
IWD6			1.40	3.40	0.50			12.50	1.00
IWD1			1.00	5.80				43.30	1.00

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

Trinomial	DMUWneck banded	DMUWpinched	DMUWtool punctated	DMUWfingernail punctated	DMUWcircular punctated I	OMUWcane punctate	ed DMUWridged	DMFengpunct.	DMFWengraved [	OMFWengraved-applique
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		0.10	0.8 [Grooved]	1812	Marceaux 2011	Ca. A.D. 1680-1730
41NA54					189	Marceaux 2011	Ca. A.D. 1680-1730
41NA21	0.10		0.02	0.03 [Lip notched]	9819	Marceaux 2011	ca. A.D. 1680-1730
				0.4 [grooved]; 0.2 [lip			
41NA22	0.10			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
				0.4 [grooved]; 0.1 [lip			
41NA206	0.02		0.02	notch]	4156	Marceaux 2011	Ca. A.D. 1680-1730
41NA67			0.50		210	Marceaux 2011	Ca. A.D. 1680-1730
41SA94				0.1 [lip notched]	1195	Marceaux 2011	ca. A.D. 1500-1700
41SA25					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	1.1 [Lip notched] 0.1 {Impressed}; 0.1	91	Selden and Perttula 2014	ca. A.D. 1500-1600
41SY280			3.10	[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
							ca. A.D. 1100-1300,
41LR2, NMNH		17.60	4.10	1.1 [lip notched]; 0.7, CCI	266	Perttula et al. 2015	1600-1740
41GG69		0.50			570	Perttula 2015a	ca. A.D. 1300-1400
							ca. A.D. 1100-1300,
41FN1		51.80	1.80		56	Perttula 2015b	1680-1730
							ca. A.D. 1100-1300,
41LR1		10.20	0.30	0.3 [lip notched]	354	Perttula 2015c	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
				1.0 [lip notched]; 1.4			
41WD6		3.40		[grooved]	208	Perttula 2015e	ca. A.D. 1430-1600
41WD1		17.30		1.0 [lip notched]	104	Perttula 2015f	ca. A.D. 1200-1400

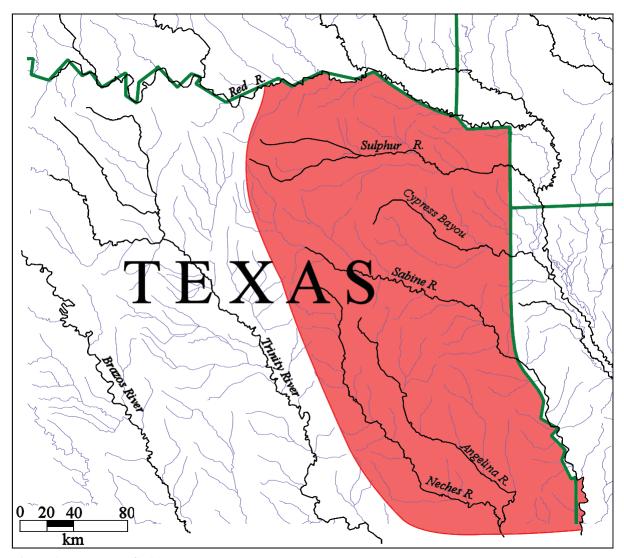


Figure 1. East Texas Caddo area.

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).

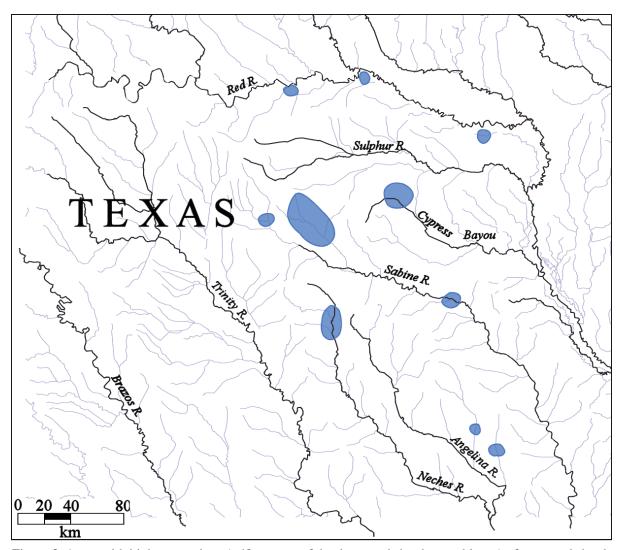


Figure 2. Areas with high proportions (>40 percent of the decorated sherd assemblages) of engraved sherds in East Texas Caddo sites.

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.

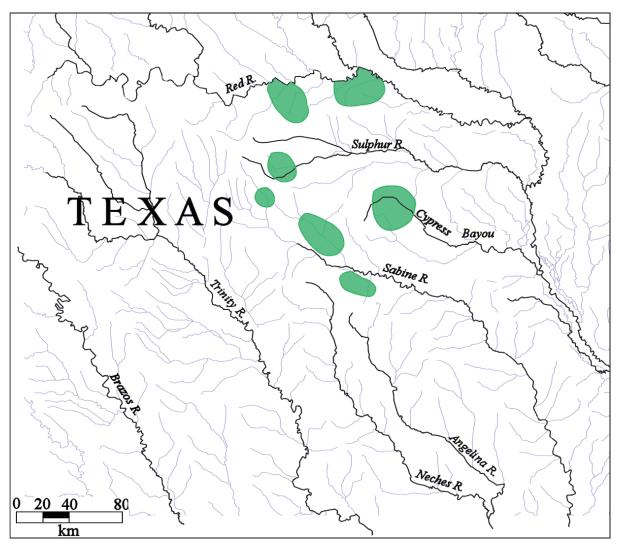


Figure 3. Caddo site clusters with high proportions (>10 percent of decorated ceramic assemblages) of red-slipped sherds in East Texas.

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).

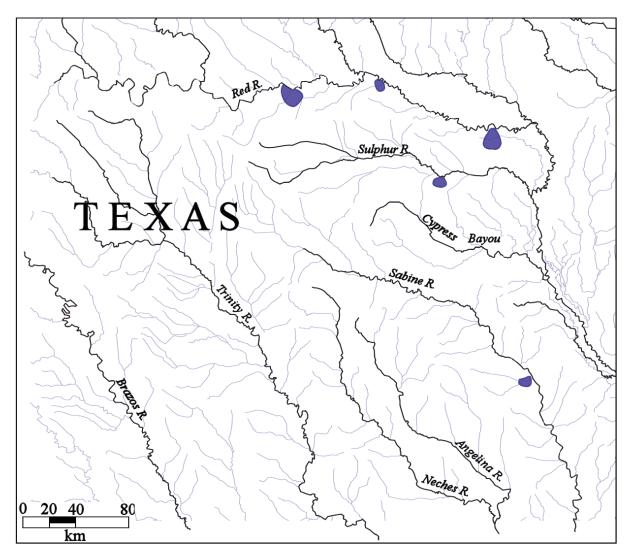


Figure 4. Distribution of sites where trailed sherds are most common in East Texas Caddo ceramic assemblages.

# **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 north-western 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.

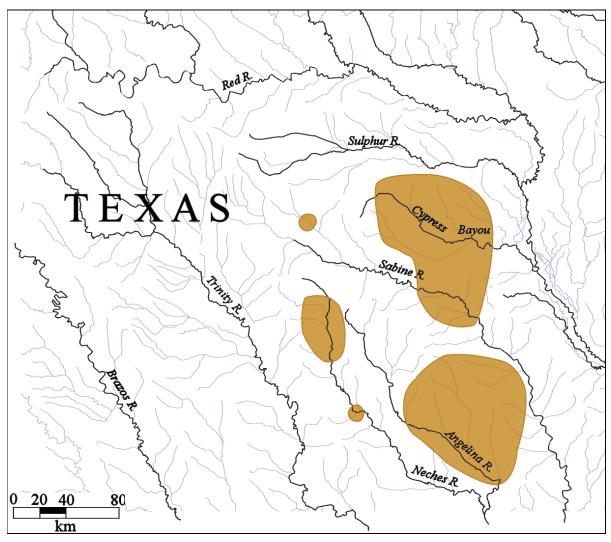


Figure 5. Caddo site clusters with high proportions (>60 percent of decorated ceramic assemblages) of brushed sherds in East Texas.

# **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

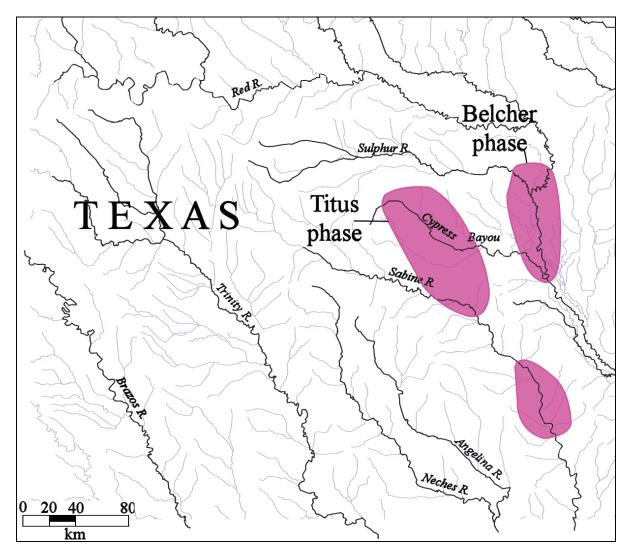


Figure 6. Distribution of sites where ridged ceramic sherds are present in East Texas, as well as the location of the Belcher phase and Titus phase sites with ridged ceramic sherds.

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).

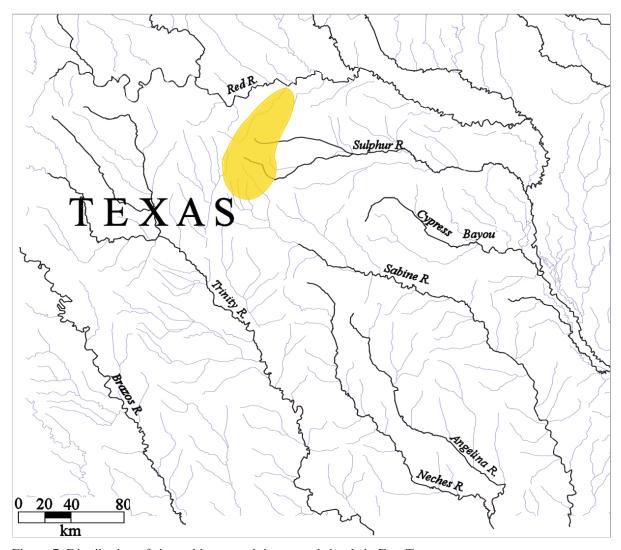


Figure 7. Distribution of sites with corn cob impressed sherds in East Texas.

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 18th 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.

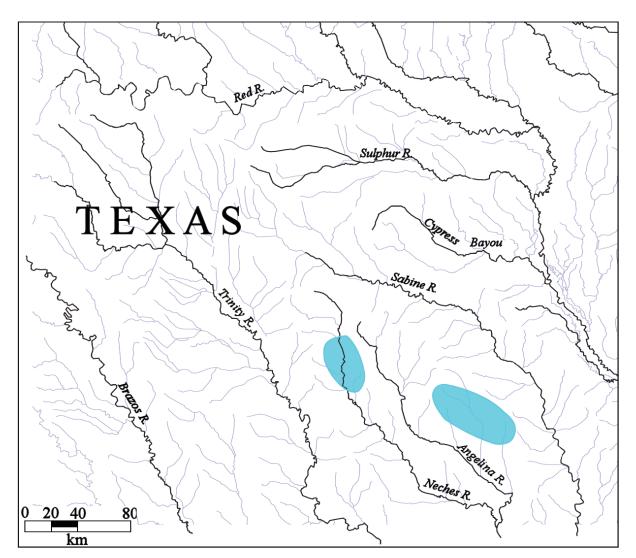


Figure 8. Distribution of East Texas Caddo sites with grooved sherds.

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).

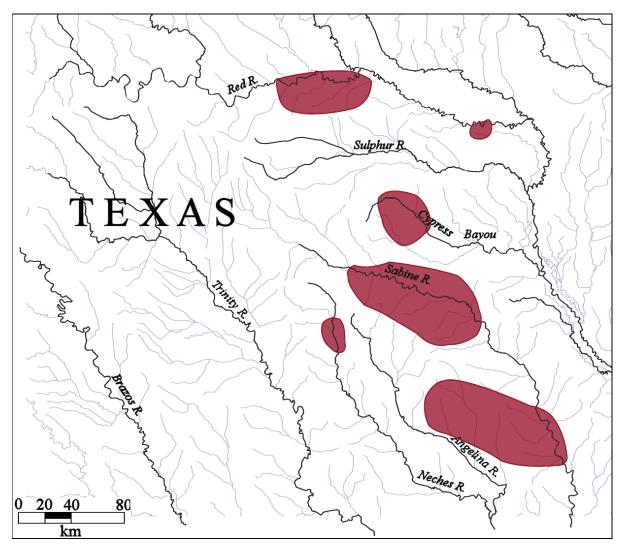


Figure 9. Distribution of Caddo site clusters with lip notched sherds in East Texas.

# **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).

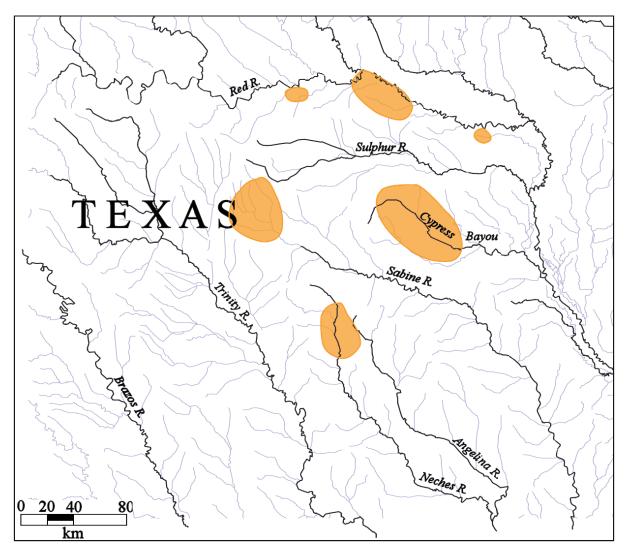


Figure 10. Distribution of areas of Caddo sites with high proportions (>5 percent of the decorated sherd assemblage) of neck banded sherds in East Texas.

# 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).

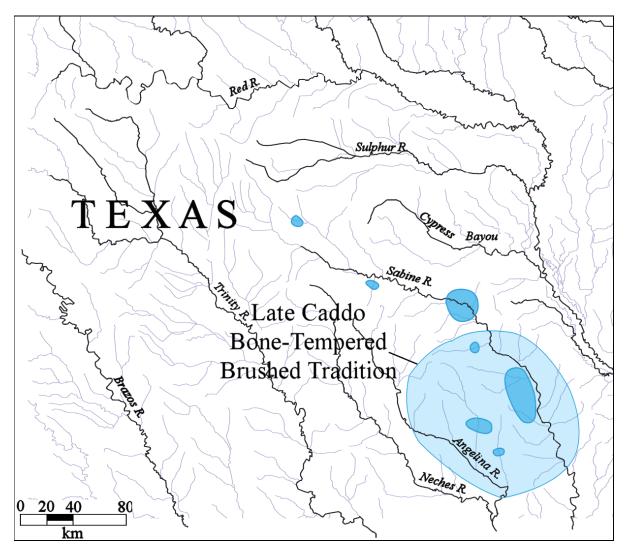


Figure 11. Clusters of Caddo sites with high proportions (>than 40 percent) of bone-tempered sherds in East Texas ceramic assemblages.

# **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. Peeples 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

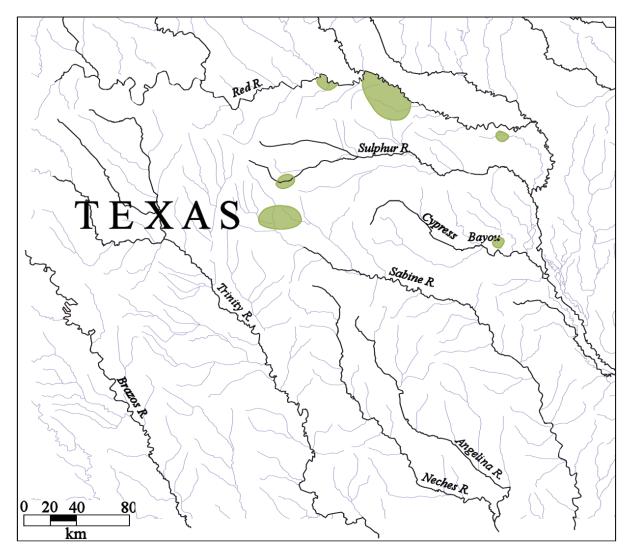


Figure 12. Clusters of Caddo sites with high proportions of shell-tempered sherds in East Texas ceramic assemblages.

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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