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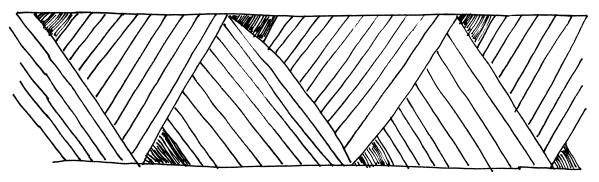
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Journal of Northeast Texas Archaeology





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Timothy K. Perttula, Editor

Bo Nelson, Distributor of Publications

 $\label{eq:cover:equation:cover:optimizer} Cover: Holly Fine Engraved vessel and motif from the Boyette site (41NA285), \\ Nacogdoches County, Texas.$

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History of the East Texas Caddoan/Caddo Research Group, 1996-2008

Timothy K. Perttula and Tom Middlebrook

INTRODUCTION

Recently, the senior author of this article has been working with Hester Davis (Arkansas Archeological Survey) regarding the editing of her manuscript on the history of the Caddo Conference (Davis and Davis 2009), which had its 50th meeting in March 2008 (Lee 2008). In her manuscript she laments the fact that there is very little time being spent by its participants in keeping track of its history: either in the form of transcripts of the meetings, notes on each conference, saving photographs and images, or actively maintaining an archive of materials resulting from each Conference. Davis pointed out that it was important to maintain a record of each Conference, and take steps to do a better job in preserving for others that record for present and future Caddo Conference participants and researchers.

Hester's points, which we agree with, led directly to our discussing the need to put on record a history, as best we can recall it, of the East Texas Caddoan/Caddo Research Group. This informal group has met a number of times since 1996, with the purpose of advancing the general understanding of Caddo archaeology in the East Texas region. The meetings have been held to discuss pertinent and current problems and research issues concerning East Texas Caddo archaeology.

As we recall, the East Texas Caddoan [now Caddo] Research Group (ETCRG) developed out of discussions between Perttula and Middlebrook in January 1996. Middlebrook's own interests in the idea had been piqued by reading the obituary of Fred Plog in the October 1995 American Antiquity (Vol. 60, No. 4, p. 679) that described his founding of the Southwestern Anthropological Research Group, the success that group had in working together on common research problems, and in working together to improve understandings of the prehistory of the American Southwest. This seemed to both of us like an idea worth emulating for the Caddo

archaeological area, or at least the East Texas part of the area since we were more familiar with this region's archaeology and the archaeologists working in that area.

After a phone conversation discussing the possibility of starting a research group, Perttula jotted Middlebrook this note on January 23, 1996:

Dear Tom,

I've been thinking about the formation of an East Texas Caddoan Research Group. Yes, let's definitely do this. As it stands right now, there is no good format to discuss research and archeological issues among a small and knowledgeable set of folks. I like the idea of trying to do this immediately before or after the Caddo Conference. If we attempt to do this for this year, we should talk some more about the agenda, protocol, etc. (One other thing we should do is get a transcript from each meeting).

I have talked with Ross Fields about this, and he agree to be part of the research group. Other people I've thought about as group members are: Jim Corbin, Dee Ann Story, Darrell Creel, Maynard Cliff, Pete Thurmond, Sharon Derrick, Bob Turner, Bo Nelson, Kathy Reese-Taylor, Diane Wilson, Mike Turner.

Let me know what you think. Do other people come to mind?

Tim

Responding on February 5, 1996, Middlebrook sent Perttula this note:

Dear Tim,

. . . This list looks good to me and I think that we should just go with it. Only

other names I could come up with may have less direct and immediate interest: Pete Gregory, Jeff Girard, Jim Bruseth, Robbie Brewington, Harry Shafer.

Suggested Outlines for the ETCRG:

- 1 Meet twice a year (once associated with the Caddo Conference, and once in the fall) for a minimum of three hours. Fall meeting should be held in East Texas.
- 2 Gathering to be informal, perhaps around a table.
- 3 Proceedings taped; edited transcripts to *Journal of Northeast Texas Archaeology*.
- 4 The emphasis should be on discussion and interaction relating to hands-on material (artifacts or pre-distributed handouts).
- 5 The purpose of the meeting will be to advance East Texas Caddoan studies through encouragement of re-evaluating and organizing existing data into testable models of cultural patterns (e.g., socio-political organization, trade interactions, etc.). New terminologies related to cultural history and artifact typology should not be avoided but encouraged if they are understood to be tentative and directed toward theory building. Just as important as the above is the encouragement of new research deepening old data in areas of chronology (e.g., radiocarbon dating), subsistence, etc. The Research Group should serve as a sounding board for developing ideas...

Tom

Perttula subsequently drafted a letter of invitation to the first group of about 18 individuals encouraging their participation in the research group.

MEETINGS OF THE EAST TEXAS CADDO RESEARCH GROUP (ETCRG)

The ETCRG has met eight times between 1996 and 2008. In the remainder of this article, we provide a brief summary of the various meetings.

The first meeting of the ETCRG was held over lunch at a Natchitoches, Louisiana, restaurant on March 30, 1996, during the 38th Caddo Conference.

We brainstormed about the organization of the group while feasting on meat pies and crawfish. No specific research topic for the group to focus on was discussed at the meeting. We did not maintain a list of attendees of this meeting, but remember that Bob Turner, at least, joined us at the lunch.

One of our most productive meetings was the second session of the ETCRG held on Sunday morning, October 27, 1996, at the Annual Meeting of the Texas Archeological Society in San Antonio, Texas. The meeting was well attended, but again we do not have a list of attendees. Dee Ann Story and Cecile Carter were major respondents to the presentations, however. A tape was made of the proceedings, but the audio quality was very poor, and consequently it has not been fully transcribed and/or published; a partial transcript has been typed but not published. The meeting considered the character of the Middle Caddo archaeological record of East Texas in its broadest geographical sense—occasioned at least in part by current research in the region, most especially the recent excavations at the Oak Hill Village site in Rusk County, Texas (see Rogers and Perttula 2004)—by reviewing major research findings along specific thematic lines (settlement, subsistence, dating, mounds, mortuary practices, ceramic traits, etc.) in each of several river basins. Summary handouts were prepared by the presenters: Maynard Cliff (lower Sulphur River Basin), Bo Nelson and Mike Turner (Big Cypress Creek Basin), Tim Perttula and Brett Cruse (the upper and middle Sabine River basin), Tim Perttula (middle Red River and upper Sulphur River basins), and Tom Middlebrook (Angelina and Attoyac River basins). Jim Corbin (Washington Square Mound Site) and Bob Turner (three Middle Caddo cemeteries in Camp and Upshur counties) discussed specific Middle Caddo sites in the region. An summary of the meeting was prepared by Middlebrook and Perttula (1997:1-8) in Volume 9/1997 of the Journal of Northeast Texas Archaeology, along with two articles on the Middle Caddo period archaeology in the lower Sulphur and Sabine River basins (see Appendix). Five additional articles appeared in Volume 10/1997 of the Journal of Northeast Texas Archaeology related to this second meeting of the ETCRG (see Appendix).

The 3rd meeting of the ETCRG was held at Legends Restaurant from 5:30-7:30 P.M. on March 14, 1997, in Norman, Oklahoma during the 39th Caddo Conference. Recorded attendees included: Tim Perttula, Tom Middlebrook. Gloria and Bob Turner, Maynard Cliff, Mike Turner, Bo Nelson,

Melinda Tate, David Jeane, Patti Haskins, Mark Walters, Wildena Guy Moffer, Cecile Carter, Stacy Halfmoon, Rolf Moore, Jeff Girard, and Pete Thurmond. Much of the session involved a presentation by Maynard Cliff reviewing ceramic analysis and typology in the Caddo area. He provided extensive handouts and review articles. Other items listed on the pre-circulated agenda for discussion included: Caddo houses (Bob Skiles), the use of celts (Jeff Girard), and future Middle Caddo period topics (Tim Perttula and Tom Middlebrook); further discussions of the Middle Caddo period at the ETCRG have not taken place. Again, a poor quality tape was made of the session, but no transcript was ever produced or published.

The next day, Perttula and Middlebrook did discuss the Middle Caddo period and the activities of the ETCRG as part of the program at the 39th Caddo Conference.

A brief informal session of the ETCRG was held on Sunday morning, October 25, 1998, at the Annual Meeting of the Texas Archeological Society in Waco, Texas. Listed attendees included: Tim Perttula, Tom Middlebrook, Maynard Cliff, Bo Nelson, Cecile Carter, Bob and Gloria Turner, Patti Haskins, and Mark Walters. Unfortunately, there are no notes regarding the topics that were discussed at this informal meeting.

Up until the 5th ETCRG meeting, our notes and records on our past meetings had been generally lacking in substantive details on what had transpired, who had attended/participated, or what the future plans of the ETCRG might be. Things began to improve with the 5th ETCRG. Leading up to the next ETCRG meeting proposed in March 1999, we sent out invitations in January 1999 to East Texas Caddo archaeologists soliciting their participation in the ETCRG:

January 10, 1999 RE: East Texas Caddoan Research Group

Dear ____:

You are invited to participate in the upcoming workshop sponsored by the East Texas Caddoan Research Group to be held on March 12th during the 1999 Caddo Conference in Jefferson, Texas, on March 12-13. The six hour workshop will address current formulations of Caddoan development through time by focusing on three general regions of East Texas (Northern Section—roughly the Red and Sulphur drainages, Central Section-Cypress and Sabine drainages, and Southern Section— Angelina and Neches drainages). You are asked to address the ____ Section, but you may adjust the boundaries of your study area in any way you see fit. You are requested to summarize the Caddoan cultural history in your area and provide suggestions of cultural-taxonomic units based on chronological and distributional data. Additionally, please discuss the key research questions that could refine our understanding of Caddoan archeology in your area. You are encouraged to construct maps illustrating your ideas or speculations of cultural-taxonomic unit distributions through time and highlighting key sites. Please feel free to bring illustrative artifacts, photos, slides, or other hands-on materials to stimulate discussion. You are asked to (1) present a 20 minute informal talk followed by open round table discussion during the workshop, and (2) provide a 2 page summary of your remarks suitable for publication in the proceedings. Please notify one of the ECRG coordinators below concerning your willingness to participate as soon as possible and not later than February 1, 1999. We look forward to hearing from you during this stimulating workshop.

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Tom Middlebrook 4218 Mystic Ln. Nacogdoches, Texas 75961 E-mail: TMdlbrk@aol.com 409-560-6733

We received enough positive responses that the 5th meeting of the ETCRG was held on March 12, 1999, during the 41st Caddo Conference in Jefferson, Texas. The ETCRG was one of the sponsors of the Conference, along with the Friends of Northeast Texas Archaeology (the publishers of the Journal of Northeast Texas Archaeology).

A tape recording was not made of the ETCRG meeting, which was held as a workshop in a separate facility from the Caddo Conference itself (Davis and Davis 2009). Attendees included: Tom Middlebrook, Mark Walters, Bo Nelson, Cecile Carter, Lissa Toboh, Helen Tanner, Macky McIntosh, Eric DeLaughter, Alex Barker, Vernon Holcomb, David McGee, Tom Walker, William McIntosh, Victor Galan, Todd McMakin, Suzanne Stallings, Rosemary Bergeron, Jeff Girard, Ross Fields, Gloria and Bob Turner, Steven Moore, David Jeane, and Nancy Kenmotsu. During the course of the meeting, Alex Barker presented research findings regarding the occurrence of shell gorgets in the Caddo archaeological area. Summaries of current formulations of regional cultural history were presented by Bob Turner (Cypress Creek Basin) and Ross Fields (Upper Sulphur River Basin and Cooper Lake). These presentations were never published, however, and we still had the feeling that the ETCRG had not gotten off the ground as a useful research group. We suspect that the hiatus between the 5th and 6th ETCRG meetings was due in large part to our inability to articulate what we wanted the group to accomplish as well as the difficulty in organizing a group of archaeologists to focus on specific ETCRG-directed topics/themes that have their own research agendas and research commitments.

The ETCRG next met after a seven year hiatus. Our purpose in meeting again was to discuss the historic archaeology of the Caddo peoples in East Texas and adjacent Northwest Louisiana. The 6th ETCRG meeting was held December 2-3, 2006, in Nacogdoches, Texas, on the campus of Stephen F. Austin State University. We chose to focus on the period after ca. A.D. 1542 to encourage, in light of recent findings and ongoing archaeological research, the consideration and development of a better regional understanding of the Caddo archaeological record in East Texas following European contact (Perttula and Middlebrook 2007:1-7), as well as better understand (as seen through the archaeological record) the nature of interaction between the Caddo peoples in East Texas and Northwest Louisiana and Europeans (cf. Barr 2007). The various presentations (with maps, images, and hands-on materials) were followed by an open round table discussion where information was shared and archaeological questions and problems were posed and further considered by the group as a whole.

Attendees at the meeting, moderated by Middlebrook and Perttula, included Tom Middlebrook, Tim Perttula, Bo Nelson, Mark Walters, Shawn Marceaux, George Avery, Jeffrey M. Williams, Jay Blaine, Jerrylee Blaine, Jeff Girard, Victor Galan, Robert Turner, Maynard B. Cliff, and David Jeane.

The 2006 ETCRG meeting was wide-ranging and varied. Most of the discussions focused on particular Historic Caddo archaeological sites and their general material culture character, but the meeting ended with questions concerning future directions in the study of the Historic Caddo archaeological record (Perttula and Middlebrook 2007:3-5). The participants in the meeting were sufficiently encouraged in the character and scope of the discussions and presentations (a number of presentations from this meeting were subsequently published in Volume 26/2007 and 28/2008 of the *Journal of Northeast Texas Archaeology*, see Appendix), that all agreed that the ETCRG should meet again in a year's time.

The 7th ETCRG meeting was held in Nacogdoches on December 8-9, 2007. Attendees at this meeting included Tom Middlebrook, Morris Jackson, Tim Perttula, Chet Walker, Shawn Marceaux, Duncan McKinnon, Bo Nelson, Mark Walters, Jeffrey M. Williams, Jeff Girard, George Avery, Mark Armstrong, Ross Fields, and Leslie Cecil.

This meeting continued the focus of the ETCRG on the Historic Caddo archaeological record in East Texas, as we had not exhausted topics arising out of the 2006 ETCRG meeting that were worthy of presentation and discussion. The range of presentations, some of which have been published (see Appendix) included the following:

a summary of recent findings from the Pine Tree Mound site (41HS15), in Harrison County, Texas, and the possibility that this site may be part of the Nondacao province encountered by the De Soto entrada in 1542 (Ross Fields):

a discussion of the known Historic Caddo archaeological record in the Red and lower Sulphur River areas (Timothy K. Perttula);

an update on a study of Historic Caddo ceramics from sites in the Neches and Angelina river basins (Shawn Marceaux);

a review of the character of the Caddo ceramic assemblage and European material culture from Mission San Jose de los Nasonis (1716-1719, 1721-1730, 41RK200) (Timothy K. Perttula and Shawn Marceaux);

the possible meaning in the patterns in colors of glass beads on aboriginal Caddo and non-Caddo sites in the region (George

reports on geophysical surveys on 16th and 17th century Caddo sites on the Red River, including parts of the Hatchel site (41BW3) known as the Hill Farm site (41BW169), by Chet Walker, and a spatially large geophysical survey at the Battle Mound (3LA1), by Duncan McKinnon. The results of these important geophysical surveys have been recently published by Perttula et al. (2008) and McKinnon (2008);

Mark Armstrong discussed archaeological findings from survey and metal detecting work at 41HS840, a possible 1830s Caddo Indian or Coushatta Indian settlement;

Jeff Williams discussed the exciting results of his GIS-aided archaeological and historical research of the El Camino Real de los Tejas in East Texas, with a particular focus on the regional landscape and river crossings (see Williams 2007);

a presentation by Morris Jackson on archival and map research relating to the search for Presidio Nuestra Senora de los Dolores de los Tejas (1716-1719, 1721-1730) and Mission Purisima Concepcion (1716-1719, 1721-1729), presented in conjunction with an update by Tom Middlebrook on the results of recent archaeological survey designed to identify these Spanish sites. At the moment, they have eluded discovery; and

a detailed presentation by Tom Middlebrook on the exciting archaeological findings from work he and Morris Jackson have been leading on the Plaza Principal (41NA303) in downtown Nacogdoches. This work has exposed and excavated a number of discrete archaeological features dating from the mid-18th century to the early part of the 19th century, and during the course of that work they have gathered an impressive sample of Spanish Colonial and aboriginal artifacts for this period, as well as well-preserved animal remains.

The 8th ETCRG meeting was held December 6-7, 2008, on the campus of Stephen F. Austin State University in Nacogdoches, Texas. Participants included Jeff Girard, Tom Middlebrook, Morris Jackson, Jeff Williams, George Avery, Bo Nelson, Jim Tiller, Shawn Marceaux, Tim Perttula, Velicia Bergstrom, Bob Turner, Chet Walker, Duncan McKinnon, Mark Walters, and Jay Blaine.

Two topics or themes were the focus of the 8th ETCRG: Caddo Origins and Caddo historic archaeology in East Texas. The latter topic was a continuation of discussions on the character of the Caddo historic archaeological record in the region from the 6th and 7th ETCRG, while the Caddo origins topic arose during conversations between participants as the 8th ETCRG was being organized and planned.

Jeff Girard developed the Caddo origins topic for the ETCRG participants by outlining a series of issues and questions worth consideration. These included "Basic Definitional Problems," "Chronology," "Social, Political, and Economic Integration," "Social and Political Hierarchies," and "Theoretical Perspectives." He also reviewed the archaeological context of Caddo origins, or the early development of Caddo Culture, in northwestern Louisiana, focusing on key sites and phases spanning the period from ca. A.D. 400-1050, along with information on the material culture (particularly ceramics) of Woodland and early Caddo sites in this region.

The discussion by ETCRG participants of Jeff's issues was wide-ranging, once we agreed that it was very difficult to specify those specific traits that would be considered diagnostic of Caddo culture, particularly early Caddo culture. From this, we considered how we could arrive at a material culture characterization of Caddo groups and peoples in the Caddo archaeological area, recognizing that the Caddo tradition includes elites vs. common folk, each having a different material culture make-up. Other issues that were considered included Caddo-Cahokia connections (possible, but difficult to identify); the organizational complexity of early Caddo groups, and the question of competing polities; mortuary comparisons and elite regalia; the idea of shaft tombs as a unique early Caddo mortuary practice; dating and chronological issues; and the spatial and temporal variability in early Caddo culture.

Other Caddo Origins presentations included the following:

Chet Walker provided an overview of the geophysical findings at the early Caddo George C. Davis mound center (41CE19). This work has resulted for the first time in

an archaeological view of the organization of an early Caddo mound center community on the landscape, and has demonstrated that there are probably hundreds of Caddo structures present on the site over the ca. A.D. 850-1300 occupation there;

Mark Walters provided a perspective from the middle reaches of the Sabine River (Smith and Upshur counties) on the character of both Woodland and early Caddo habitation and mound sites, focusing on the Browning site (41SM195), a late Woodland Mill Creek Culture site:

The Mast site (41NA157) was the focus of a presentation by Tom Middlebrook, and led to a consideration of the Woodland/Caddo transition in the East Texas Pineywoods. The Mast site is primarily a Mossy Grove Woodland site with plain sandy paste (Goose Creek Plain, var. unspecified) pottery, dart points, and burned rock features; it is undated by radiocarbon at the present time, and no report on the excavations by Stephen F. Austin State University has been prepared. The site has no midden, and was perhaps seasonally occupied. The consensus of the ETCRG participants was that to learn more about the local archaeological record during Woodland and early Caddo times it would be important to focus on lifeways as can be detected in the archaeological deposits, and less on the specifics of material culture or cultural-taxonomic identifications:

The Devils Ford Creek site (41SB157) is a late Woodland Mossy Grove culture site excavated by the U.S. Forest Service in 1999; no report has been published on this work. Velicia Bergstrom provided an overview of the archaeological findings;

Timothy K. Perttula focused on the Caddo origins issue by discussing the archaeological findings from the Boyette site (41NA285) at Lake Naconiche (Perttula 2008). Here, excavations have identified a Late Woodland component that dates from cal AD 667-847, followed by an early Caddo component that dates from cal AD 873-1075; the latter is contemporaneous with the Alto phase, but is not a component of that phase or part of the same cultural group, but part of a separate Caddo com-

munity. Characteristics of the material culture record (especially the sandy paste or tempered ceramic wares) suggest stylistic and technological similarities between the two components, rather than a stylistic and technological replacement (which would be expected if the Woodland and early Caddo groups were not related). Pertula views the 7th to early 9th century Woodland population to be directly antecedent or ancestral to the 9th-11th century Caddo population that lived at the Boyette site.

Our consideration of Caddo origins concluded with a discussion of the direction the ETCRG could proceed in arriving at a more current and broader understanding of Late Woodland and early Caddo populations and lifeways, and develop a more nuanced perspective on Caddo origins. One issue that was raised was our need to better appreciate what was taking place among other aboriginal groups at that time (ca. A.D. 700-1050)—and what "influences" or cultural practices might have been in play—particularly in the Lower Mississippi Valley, Cahokia, the Texas and Louisiana Gulf Coast, Toltec, and the Arkansas River valley (i.e., Spiro area). Future discussions of Caddo origins might profit by including archaeologists that are actively conducting archaeological research in these areas during the relevant temporal period. It was also agreed that it was important for ETCRG participants to work together to compile up-to-date archaeological information relevant to Caddo origins, including: material culture attributes and assemblages (i.e., ceramics, celts, chipped stone tools); mound constructions; mortuary rituals and regalia; kinds of structures found in ceremonial and domestic contexts; and absolute dates of sites and key features. Finally, ETCRG participants agreed that it is important to identify key sites thought to date between ca. A.D. 700-1050 that have the potential, through future work, to possess archaeological deposits of the appropriate age and character to directly contribute relevant archaeological information on Caddo origins. Some sites mentioned in this regard included James Pace (16DS268), Bowman (3LR46), Boxed Spring (41UR30), Hale (41TT12), and Fasken (41RR14) in northwestern Louisiana, southwestern Arkansas, and East Texas.

The Historic Caddo archaeology topic discussion in the 8th ETCRG meeting was initiated by Jeff Williams, whose presentation was entitled "Research on El Camino de los Tejas." This was an overview of

research conducted to date, and the need to identify high potential significant sites along the trail, including historic Caddo sites. The idea was broached that the ETCRG work together through a National Park Service challenge cost share grant to locate and document such sites, in conjunction with involvement from the Caddo Nation of Oklahoma, but no consensus or plan of action was reached on how to do that.

Further presentations on Historic Caddo archaeology at the 8th ETCRG included:

George Avery's presentation concerned 2008 archaeological investigations (primarily shovel testing) in a small area of mission-era deposits at Mission Dolores (41SA25) in San Augustine, Texas. This work was done as part of a planned mission replication project at the site;

Jim Tiller talked at length, accompanied with many maps, on the subject of the location of a number of early 19th century Caddo villages along the Texas-Louisiana border, including four villages (North Caddo, Middle Caddo, Big Spring, and South Caddo) in what is now Harrison County, Texas (see also Tiller 2008). He laid out the case that the 19th century Caddo village known as Timber Hill, Dehahuit's Timber Hill, is in actuality the North Caddo Village along Haggerty's Creek and Trammel's Trace. None of these villages have yet to be conclusively identified through archaeological investigations, however;

Duncan McKinnon provided further information on the archaeo-geophysical survey investigations he has recently completed at the Battle site (3LA1) in the Great Bend area of the Red River. A wide variety of habitation features and possible burial areas have been identified in this work. Future plans here include continued geophysical survey in new areas at the site, conduct landscape geomorphological studies, archaeologically test identified geophysical anomalies, and synthesize the findings from the 1948 excavations at the site by Alex D. Krieger and Lynn Howard;

The J. T. King (41NA15) site is an historic Caddo village in the Angelina River basin in western Nacogdoches County, situated on the northern route of the Camino Real de los Tejas, about 5 km east of the Angelina River. Tom Middlebrook discussed recent archaeological investigations (surface collection, shovel testing, and 1 x 1 m units) he carried out at the site, focusing particularly on the character of the aboriginal ceramics (dominated by grog-tempered brushed utility wares and Patton Engraved fine wares), as well as the lithics (predominantly on non-local cherts, including triangular arrow points); a cupreous tinkler was recovered from one of the 1 x 1 m units. Based primarily on the kinds and proportions of decorated sherds in the J. T. King site ceramic assemblage, Middlebrook suggested that the Caddo occupation is a component of the Deshazo subcluster within the ca. 1720 Anderson cluster (cf. Corbin 2007:19-20):

Chet Walker next discussed the utility of an EM-61 geophysical instrument as a means for efficiently locating metal artifacts in archaeological deposits on Historic Caddo sites in East Texas; and

Timothy K. Perttula ended the discussion of the Historic Caddo archaeology topic for the 8th ETCRG with a consideration of the diversity in late 17th-18th century ceramics on key Caddo sites in Nacogdoches County with well-studied assemblages, namely: Henry M. (41NA60, see Middlebrook and Perttula 2008), Deshazo (41NA27, Story 1995), and Spradley (41NA206), as well as other sites documented by Middlebrook (2007). Those analyses indicated that the Henry M. site and the Deshazo site are ceramically most similar; Bayou Loco and Angelina River sites are dominated by brushed utility wares; the Lanana Creek, Legg Creek, and Attoyac Bayou sites are part of a different local Caddo ceramic tradition. Finally, five distinct groupings of Historic Caddo sites can be defined employing various ceramic attributes, and these groupings may represent sites occupied by different and socially distinct Caddo communities.

CONCLUSIONS

The success of the last three ETCRG meetings has put the ETCRG on firm ground as a viable venue in which to discuss in detail—but in an informal setting—research issues, problems, and findings concerning East Texas Caddo archaeology. As long as there is a group of dedicated Caddo archaeological researchers that continue to work in the East Texas region, we hope that this group will remain a productive way in which to improve our understanding of the prehistory and history of the Caddo peoples.

As we write this, plans are afoot to hold the next, and 9th, ETCRG meeting in Nacogdoches, Texas, in 2009. The focus of the meeting has yet to be determined.

ACKNOWLEDGMENTS

First, we thank all of the various ETCRG meeting attendees, who came and actively participated in the meetings. We would also like to thank George Avery, Bo Nelson, and Duncan McKinnon for commenting on an earlier version of this article.

REFERENCES CITED

Barr, J.

2007 Peace Came in the Form of a Woman: Indians and Spaniards in the Texas Borderlands. University of North Carolina Press, Chapel Hill.

Corbin, J. E.

2007 Cultural Diversity in the Southern Caddo Region. Journal of Northeast Texas Archaeology 26:11-23.

Davis, H. A. and E. M. Davis

2009 An Account of the Birth and Growth of Caddo Archeology, as Seen by Review of 50 Caddo Conferences, 1946-2008. Caddo Archeology Journal 19:3-72.

Lee, D.

2008 50th Caddo Conference: A Retrospective. Natchitoches, Louisiana 2008. The Louisiana Regional Folklife Program, Williamson Museum, The Louisiana Regional Archaeology Program, and Northwestern State University of Louisiana.

McKinnon, D. P.

2008 An Archaeogeophysical Analysis of Central Caddo Settlement Patterning at Battle Mound (3LA1). Master's thesis, Department of Anthropology, University of Arkansas, Fayetteville.

Middlebrook, T.

2007 A Survey of Historic Caddo Sites in Nacogdoches County, Texas. *Journal of Northeast Texas Archaeology* 26:99-115.

Middlebrook, T. and T. K. Perttula

1997 The Middle Caddoan Period in East Texas: A Summary of the Findings of the East Texas Caddoan Research Group. *Journal of Northeast Texas Archaeology* 9:1-8.

2008 Archaeological Investigations at the Henry M. Site (41NA60): An Early Historic Caddo Farmstead in Nacogdoches County, Texas. *Journal of Northeast Texas Archaeology* 28:13-20.

Perttula, T. K. (editor)

2008 Lake Naconiche Archeology, Nacogdoches County, Texas: Results of the Data Recovery Excavations at Five Prehistoric Archeological Sites. 2 Vols. Report of Investigations No. 60. Archeological & Environmental Consultants, LLC, Austin.

Perttula, T. K. and T. Middlebrook

2007 Historic Caddo Archaeology: An Occasional Meeting of the East Texas Caddo Research Group, December 2-3, 2006, in Nacogdoches, Texas. *Journal of Northeast Texas Archaeology* 26:1-7.

Perttula, T. K., C. P. Walker, and T. C. Schultz

2008 A Revolution in Caddo Archaeology: The Remote Sensing and Archaeological View from the Hill Farm Site (41BW169) in Bowie County, Texas. *Southeast-ern Archaeology* 27(1):93-107.

Rogers, R. and T. K. Perttula

2004 The Oak Hill Village (41RK214), Rusk County, Texas. Document No. 030083. PBS&J, Austin.

Story, D. A. (editor)

1995 The Deshazo Site, Nacogdoches County, Texas, Volume 2: Artifacts of Native Manufacture. Studies in Archeology 21. Texas Archeological Research Laboratory, The University of Texas at Austin.

Tiller, J.

2008 Was Timber Hill the Last Caddo Village in the Caddo Homeland? Caddo Archeology Journal 18:11-21.

Williams, J. M.

2007 GIS Aided Archaeological Research of El Camino Real de Los Tejas with Focus on the Landscape and River Crossings along El Camino Carretera. Masters of Spatial Science, Stephen F. Austin State University, Nacogdoches.

APPENDIX, PUBLICATIONS ARISING DIRECTLY FROM THE EAST TEXAS CADDO RESEARCH **GROUP MEETINGS**

Avery, G.

2008 Seed Bead Color Patterns from Colonial Period Sites in Texas and Louisiana. Journal of Northeast Texas Archaeology 28:57-63.

Cliff, M. B.

1997 The Middle Caddoan Period in the Lower Sulphur River Area. Journal of Northeast Texas Archaeology 9:9-16.

Fields, Ross C.

2008 The Pine Tree Mound Site and the Entrada of the Hernando De Soto Expedition of 1542. Journal of Northeast Texas Archaeology 28:1-8.

Girard, J. S.

2007 Sites in Northern Louisiana with Major Collections of Historic Caddo and other Native American Pottery. Journal of Northeast Texas Archaeology 26:24-32.

Gregory, H. F. and G. Avery

American Indian Pottery from Historic Period Sites in North Louisiana. Journal of Northeast Texas Archaeology 26:33-76.

Marceaux, P. S.

2007 Recent Research on the Archaeological and Historical Evidence of the Hasinai. Journal of Northeast Texas Archaeology 26:82-98.

Middlebrook, T.

- 1997 The Caddoan Occupation of the Attoyac and Angelina River Basins in the Middle Caddoan Period. Journal of Northeast Texas Archaeology 10:36-40.
- A Survey of Historic Caddo Sites in Nacogdoches County. Journal of Northeast Texas Archaeology 26:99-115.

Nelson, B. and M. Turner

1997 Middle Caddoan Sites in the Cypress Creek Drainage Basin. Journal of Northeast Texas Archaeology 10:1-11.

Perttula, T. K.

1997a Middle Caddoan Period Archaeology in the Upper Sulphur River Basin. Journal of Northeast Texas Archaeology 10:41-46.

- 1997b The Archaeology of the Middle Caddoan Period in the Middle Red River Valley of Northeast Texas. Journal of Northeast Texas Archaeology 10:47-51.
- 2007a Points of Discussion and Directions for Research on Caddo Historic Archaeology. Journal of Northeast Texas Archaeology 26:8-10.
- 2007b One Attempt at Defining Allen Phase Ceramic Subclusters. Journal of Northeast Texas Archaeology 26:77-81.
- 2007c Upper Neches River Basin Caddo Ceramics, an Attempt at an Updated Seriation and a Context for Understanding Frankston to Allen Phase Ceramic Stylistic and Technological Changes. Journal of Northeast Texas Archaeology 26:154-158.
- 2008a Historic Caddo Archaeology on the Red and Lower Sulphur River Areas of Northeast Texas. Journal of Northeast Texas Archaeology 28:25-34.
- 2008b Trends and Varieties in Late Caddo and Historic Caddo Fine Ware Pottery Types in the Upper Neches River Basin. Journal of Northeast Texas Archaeology 28:51-55.

Perttula, T. K. and J. B. Cruse

1997 The Caddoan Archaeology of the Sabine River Basin during the Middle Caddoan Period. Journal of Northeast Texas Archaeology 9:30-37.

Perttula, T. K., B. Young, and P. S. Marceaux

Caddo Ceramics from an Early 18th Century Spanish Mission in East Texas: Mission San Jose de los Nasonis (41RK200). Journal of Northeast Texas Archaeology 29:81-89.

Turner, R. L.

- 1997 Observations on Four Probable Middle Caddo Cemeteries in Camp and Upshur Counties. Journal of Northeast Texas Archaeology 10:12-35.
- Pottery from 41NA202: The Stephens Site in Nacogdoches County, Texas. Journal of Northeast Texas Archaeology 28:9-11.

Walters, M.

Late Titus Phase Sites along Caney Creek in North-2007 ern Wood County, Texas. Journal of Northeast Texas Archaeology 26:145-149.

The Henry Chapman Site (41SM56)

Mark Walters

INTRODUCTION

In the mid-1950s, Sam Whiteside conducted excavations at the Henry Chapman site, his site P-5 (41SM56), on Prairie Creek in eastern Smith County, Texas, some 18 miles east of Tyler, Texas. Mr. Whiteside was an amateur archaeologist who discovered and explored numerous sites up and down Prairie Creek as well as other important sites in Smith and adjoining counties (Walters 2005). The Chapman site was one of the first sites to be investigated by Mr. Whiteside, and the major part of the work took place there in 1957 and 1958.

In August 1957, the site was visited by Edward B. Jelks and Leroy Johnson, who viewed the excavations and examined artifacts collected from there. Mr. Jelks, in notes on record at the Texas Archeological Research Laboratory (TARL) at The University of Texas in Austin, Texas, on August 21, 1958, indicated after observing the artifacts from the Henry Chapman site that the ceramics indicated an Alto focus occupation. He recognized Hickory Engraved and Holly Fine Engraved wares as well as Dunkin Incised and possible Pennington Punctated-Incised sherds. He mentioned that no Crockett Curvilinear Incised or Weches Fingernail Impressed sherds were present (two common types present at the Alto focus type site, the George C. Davis site [41CE19]). E. Mott Davis also visited the site in late 1957, and in February 1959, Davis, Lathel F. Duffield, and William A. Davis collected skeletal material from the site. In a June 15, 1958, newsletter from the East Texas Archeological Society (ETAS), Mr. Whiteside described excavations at the Henry Chapman site that had revealed refuse pits, post holes, and an abundance of pottery sherds indicative of an Alto focus occupation.

In the summer of 1983, Mr. Whiteside visited the University of Texas Field School at the George C. Davis site, where he loaned some of his notes and collections from the Chapman site for recording purposes (these are on file at TARL).

After Mr. Whiteside's death, his family graciously allowed me access to his notes and artifacts. Not all of the artifacts have survived, having been stored in paper bags and subjected to several moves, but thanks to Mr. Whiteside's writing lot numbers on artifacts and listing them in a journal, a majority of them have survived, and thus are suitable for study. Although 50 years have passed since Mr. Whiteside's work at the Henry Chapman site, it is my intent to now make that work public.

SETTING

There are several Prairie Creeks in Smith County. This particular Prairie Creek has its headwaters in central Smith County some 10 miles east of Tyler. Prairie Creek then flows past the Chapman site about 10 miles in an easterly direction, joining the Sabine River near present day Gladewater, Texas. At the location of the Chapman site, the Prairie Creek floodplain is approximately 1/4-mile wide. The present day Prairie Creek channel is located on the opposite side of the floodplain from the site, but channel scars and meander are evidence that it has migrated back and forth across the floodplain in the past.

The Chapman site is located on a low sandy terrace some 8 ft. above the Prairie Creek floodplain. The terrace is approximately 100 x 160 ft. in size, covering some 16,000 ft.², or 0.4 acres. A spring branch forms the northern boundary of the site; the west side ends at a steep hillside; and the east and south boundaries are the Prairie Creek floodplain.

The landowner reported that the site was under cultivation for a two year period around 1940. After that it was allowed to return to native woodlands, and it was harvested for timber shortly before Mr. Whiteside began excavations in 1957. For those unfamiliar with East Texas, nature here abhors empty spaces, rushing in at its first opportunity to cover the bare spots with all matter of vegetation.

Only after successive generations of plant growth have evolved do the woods reach enough height to crowd out some of the brush and make the woods fairly open again. This mass of vegetation caused Mr. Whiteside to write in his notes at one point in bold letters "excavation very difficult."

EXCAVATIONS

Mr. Whiteside discovered the Chapman site in the winter of 1957 and obtained landowner permission to conduct excavations there. He noted that there was a lack of surface visibility due to the previously mentioned mass of vegetation and he also noted that there were few artifacts present in the first 0.5 ft. of excavations. It is not known whether this sterile layer was the result of soils being deposited on the site sometime after the prehistoric occupation ended, or if it is the product of the action of earthworms bringing sterile soil to the surface over a number of years.

After establishing a grid system over the site in 5 x 5 ft. squares, Mr. Whiteside excavated a number of trenches across the site, expanding them into a series of contiguous 5 x 5 ft. excavation blocks when cultural materials were encountered. Mr. Whiteside used feet and inches for measurements, that being the accepted practice at the time. Shovels, trowels, and a screen (probably with a 1/2-inch mesh) were used in the excavations. At times, when working alone, Mr. Whiteside stated in his notes that he did not screen all of the soil but relied on shovel-skimming, taking thin slices with the shovel or trowel to recover artifacts and expose features. Artifacts were collected in 6 inch (0.5 ft.) intervals within each 5 x 5 ft. excavation square. After washing, the recovered artifacts were given an individual catalog number (or lot number as used in the report) corresponding to their depth below the surface and North and East grid coordinates. A plan view was made depicting the excavation areas and the locations of identified features (most of the time). Profiles were made illustrating soil strata and vertical views of features.

Members of the ETAS, headquartered in Tyler, Texas, aided in the excavations. Those helping included Earl Ginn, Douglas Procter, Darrel Sanders, and E.W. Hayner. At times, Mr. Whiteside employed some of his farm laborers, including Ben Tolbert and Roscoe Ford, in excavations at the Chapman site. Mr. Whiteside's teenage son Jim was a big asset in the excavations and mapping.

Based on his notes, Mr. Whiteside excavated in the course of several years some 1800+ ft.2 at the Henry Chapman site (Figure 1). In his notes, he indicated that excavations revealed three roughly circular 20-30 ft. diameter areas (I, II, and III) marked by increased artifact concentrations and darker carbonstained soils (Figure 1). He surmised that these areas represented circular house locations. Area I had the deepest midden deposits along with a large trash pit (Feature 2). Area II was marked by increased artifact densities; an arc of possible post holes (Feature 11); and several pit features. Soils were thinner in Area II and post holes were detected only when they extended into the clay subsoil. Area III was suggested to represent the location of a burned structure because of the presence of a fired mud dauber nest with grass and reed impressions on one side. Such nests are often constructed in protected locations such as inside structures (Walters 2008:66). There were also pieces of daub with grass/cane impressions and portions of a "green" unfired vessel that had been distorted by intense heat (Figure 2). There were no features identified in Area III, however.

Mr. Whiteside described a typical soil profile at the Chapman site as:

Zone 1, a dark brown (10YR3/3) to very dark brown (10YR2/2) organically enriched loamy fine sand that varies from 1 ft. to 1.5 ft. bs. in depth. Area I is described as having the thickest Zone 1 deposits. Most of the prehistoric artifacts were recovered from this zone. At places, this zone is capped by 0.5 ft. of a sterile overburden attributed to slope-wash;

Zone 2, this is a yellowish-brown (10YR5/4) loamy fine sand that varies from 0.75-2 ft. in depth. Few artifacts were recovered from this zone; and,

Zone 3, a sticky, yellowish-red (5YR5/6) sterile sandy clay that varies in depth across the site. In Area II, the Zone 3 soils were closest to the surface, making features in this area more distinct because of the distinct soil color changes between Zones 1/2 and the sandy clay.

FEATURES

Mr. Whiteside made note of several features discovered during excavations at the Chapman site,

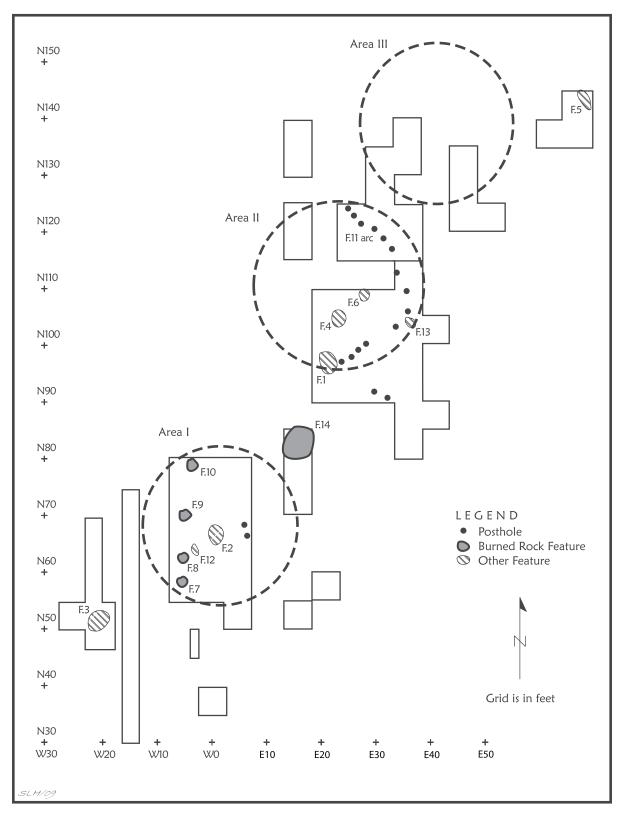


Figure 1. Plan of excavations at the Henry Chapman site (41SM56).



Figure 2. "Green" unfired vessel from Area III.

some in greater detail than others. Most of these features, excluding the two burials, were associated with the three areas (I-III) that Mr. Whiteside identified as possible house locations with associated pits and hearths (see Figure 1). Large pits are common on early Caddo sites and probably represent food storage facilities reused as trash receptacles after they were emptied of their intended contents. Hearths occur inside structures or in outdoor activity areas. One set of features in Area II was a partial post hole pattern from a Caddo house. Of the two burial features, one was a partial cremation that was associated with the Caddo occupation; the cultural affiliation of the other burial has not been determined.

Feature 1 (N105-110 E20-25)

This is a pit feature that is 2 x 2.5 ft. in diameter and 2.5 ft. deep containing 56 sherds; four partially reconstructed vessels (see whole vessels); animal bone, including a deer skull fragment with attached antler; deer teeth and vertebra; mussel shell; flakes; and a smoothing stone. The sherds included two that are engraved, one an engraved rim with opposing diagonal lines; 30 incised sherds, including two rims; and 24 plain sherds, including two plain rims.

Feature 2 (N75-80 E0-5, 2 ft. bottom depth)

The feature is a dark charcoal-rich stain (Figure 3b) that is approximately 3 ft. in diameter and extended to 3 ft. bs. Artifacts included in the fill are flakes, sherds (three incised, one engraved, and three plain body), and animal bones. Charred animal bone collected from 0.5-1.0 ft. bs in the feature fill was submitted to The University of Texas at Austin on February 28, 1958, for a radiocarbon date, but were never actually submitted for radiocarbon dating. Records at TARL show the specimens were discarded on August 21, 1969, without being analyzed.

Feature 3 (N59.5-63.5 W16.5-20.0, 2.5 ft. bottom depth)

On November 25, 1957, in a trench (N60-70 W15-20) excavated by Ben Tolbert and Roscoe Ford, a charcoal stain was noted at 2.5 ft. depth. Excavations exposed a 3.5 ft. diameter pit that extended to 3 ft. bs with charred logs and human bone underneath the charred logs (Figure 4). A skull was on the north side of the pit, on its left side facing to the east. The lower 0.67 ft. of the burial pit was very black from charcoal staining. The lower part of the burial pit also had clay mottles that were the result of the pit having been dug into the clay subsoil. A clear pit outline could not be determined above 2.5 ft. bs in the dark brown cultural zone, but below that depth a circular pit approximately 3.5 ft. in diameter was observed. Artifacts in the pit fill indicated that the pit had been dug into and through an existing Caddo occupational deposit.

According to Mr. Whiteside's journal, he turned over skeletal material, including a cranium, from the Henry Chapman site on February 24, 1959, to E. Mott Davis. E. Mott Davis's personal journal notes on Tuesday, February 24, 1959, that "we (E. M. Davis, L. F. Duffield, and W. A. Davis) drove to Sam Whiteside's at Tyler... Sam gave us... skeletal material from his P-5 site." There were other scattered human bones in the pit, but it is not clear from the notes if all of the bone was charred. Records from TARL indicate that there are two human remain entries from the Chapman site but it is not conclusive at this time if these remains are actually from the Chapman site.

A 0.5 ft. diameter charred log lay east-west across the head/neck area of the grave, and two samples were collected for radiocarbon dating, although the exact whereabouts of these samples are not known. A second log, not as well preserved, lay in a north-south direction on the west side of the pit. A portion of one of the charred logs survived in the

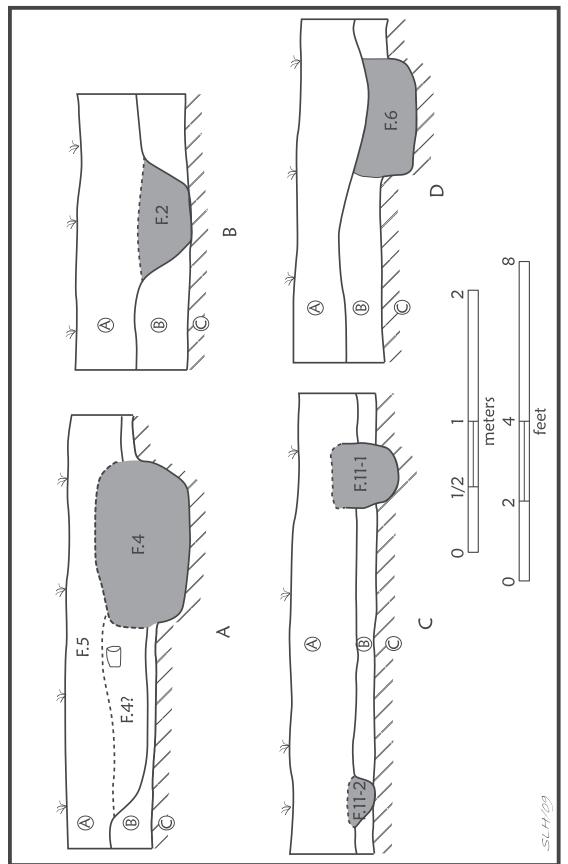


Figure 3. Profiles of features and archaeological deposits: a, Feature 4; b, Feature 2; c, Feature 11-1 and 11-2; d, Feature 6.

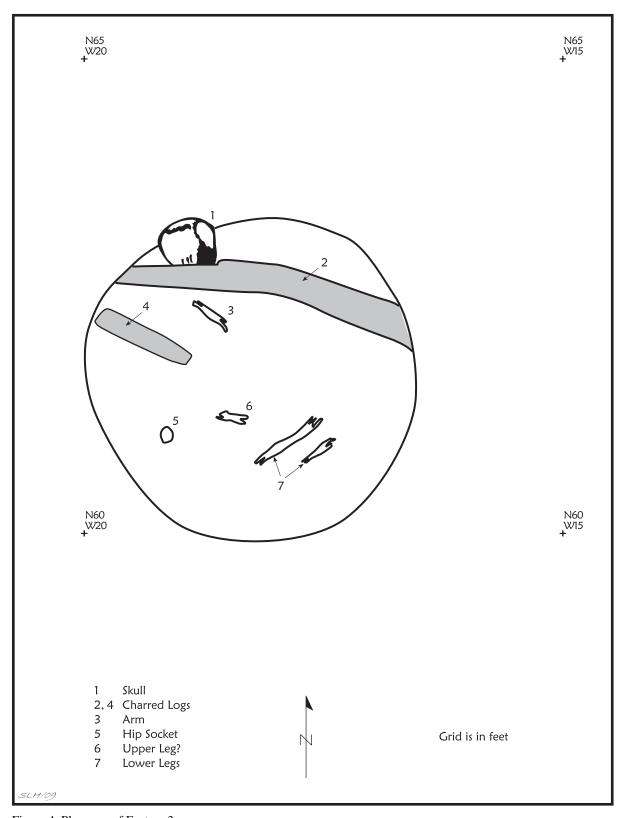


Figure 4. Plan map of Feature 3.



Figure 5. Dunkin Incised jar from Feature 4.

Whiteside collection and was submitted by the author for radiocarbon dating, yielding a 2 sigma calibrated age range of AD 1280-1440. There were no obvious grave goods associated with the burial. Mr. Whiteside speculated in his notes that after the body had been placed in the pit, a fire was built over the body, partially consuming it and charring the bones. The pit was then refilled with soil that was used to extinguish the fire before the logs were completely oxidized.

Caddo ceramics in the burial fill of Feature 3 include four incised body sherds; one incisedpunctated rim with diagonal incised lines separating triangular zones of tool punctates; one rim with broad excised horizontal bands and red pigment; and three plain body sherds. There were also two ferruginous sandstone slabs in the burial fill. They were unmodified, and measured 5 x 4 cm in length and width, and were 1.0 cm thick.

Feature 4 (N110-115 E 25-30, Bottom depth: 3 ft. bs)

This is a circular-shaped pit, although the exact dimensions are not clear. Based on the profile, it appears to have been ca. 9 ft. in diameter, with a 4 ft. diameter portion that extended to 3 ft. bs, well into the clay subsoil (see Figure 3a). The deeper portions of the pit feature were first identified at 1 ft. bs, and found in it was one rim sherd with diagonal incised lines, an incised body sherd, and three plain body sherds. The shallow portion of the pit contained most of a Dunkin Incised jar (Figure 5), with a bottom depth of 1.5 ft. bs.

Feature 5 (N150-155 E65-70, Bottom depth is 2 ft. bs)

This is a possible burial feature in Area III (see Figure 1). In Mr. Whiteside's journal, lot numbers 1056-1082 are listed as B2 with artifacts collected from 0-2 ft. However, there is no description of these artifacts. At TARL, there is a long bone and adultsized skull fragment (about 2 x 3 inches in size), neither of which are burned. A tag in the box reads "P-5 bone, Burial 2, Whiteside cat. #1147." This is in agreement with Mr. Whiteside's journal entry for Lot 1147: Bone B2.

Feature 6 (N118 E30, Bottom depth, 2.83 ft. bs)

Feature 6 is a ca 2.0 ft. diameter circular pit inside an arc of possible post holes. The pit extended into the clay subsoil (see Figure 3d). The only artifact listed as being found in Feature 6 is one plain sherd.

Features 7-10

These are burned rock features exposed at 1.67 ft. bs, with the following Area I proveniences at the site: Feature 7, N58 W2; Feature 8, N60 W4; Feature 9, N72.5 W5; and Feature 10, N79 W5.6 (see Figure 1).

Feature 11—Area II (N105-135 E10-40)

Feature 11 is an arc of 14 post holes of what appears to be a circular house structure roughly 20 ft. in diameter (see Figure 1). The distance to the clay sub-soil was shallower (2 ft. bs) in this area and Mr. Whiteside was able to distinguish the post hole stains as they appeared in the clay subsoil. He indicated the depths of the posts were irregular, the pattern being a large post placed at 4 ft. intervals set to a total depth of 2.5-3 ft. bs in the ground, with smaller posts placed between that were set at depths of 2 ft. (see Figure 3c).

Feature 12

Feature 12 is a hearth (N63.5 W1) inside Area I, a possible house location (see Figure 1). The hearth was marked by a 2 ft. diameter ash deposit at 1.5 ft. bs.

Feature 13

Feature 13 is a hearth with ash deposits in Area II (N101 E36). This feature was associated with a pattern of post holes from a circular structure, but it was situated outside of the post hole arc, suggesting it may have been an outdoor hearth (see Figure 1). The feature was exposed at 0.67 ft. bs.

Feature 14

Feature 14 is a concentration of rocks (N80-85 E15-20) uncovered at 1.83 ft. bs by Area I (see Figure 1). No other information is available about the character of the rock feature.

Radiocarbon date

There is one radiocarbon date from the Henry Chapman site on charred wood from Feature 3. The conventional age is 580 ± 60 B.P. (Beta-129978). The calibrated intercept is AD 1400 (cal BP 550).

At two sigma, there is a 95% chance that the calibrated age of the wood charcoal falls between AD 1280-1440.

ARTIFACTS FROM THE HENRY CHAPMAN SITE

A total of 543 artifacts remain from the 1950s excavations by Sam Whiteside at the Henry Chapman site (Table 1). More than 84% of the recovered artifacts are plain and decorated ceramic sherds and vessels/partial vessels, with small amounts of lithic tools and debris (8.4%), animal bone (6%), and mud dauber nests and pieces of daub (0.9%). Notable by their absence are ceramic pipes, which occur in varying numbers on most East Texas Caddo sites.

Ceramic Sherds

There are 453 sherds included in the Henry Chapman collection, of which 286 are decorated

Table 1. Artifacts from the Henry Chapman Site.

Artifact Class	Туре	No. of Specimens	
Ceramics	Decorated sherds	286	
	Plain rims	25	
	Plain body sherds	132	
	Base sherds	10	
	Whole/partial vessels	7	
	Sub-total	460	
Lithics	Flakes	19	
	Points/tools	14	
	Celts	5	
	Cores/tested cobbles	5	
	Abraders	3	
	Sub-total	46	
Fauna	Animal bone	32*	
Miscellaneous	Fired mud dauber nests	2	
	Daub	3	
Total		543	

^{*} An unknown number of charred animal (Lot # 516) bone was submitted for radiocarbon dating by The University of Texas in 1958, but they were never analyzed.

Table 2. Decorated Sherds.

Decoration	No.	Percentage
Punctated	96	33.6
Engraved	84	29.4
Incised	74	25.9
Punctated-incised	32	11.2
Totals	286	100.1

(see Table 1). The plain to decorated sherd ratio is only 0.6:1.

The decorated sherds (Table 2) from the site have four different decorative methods. The utility wares include sherds with punctated, incised, and punctated-incised designs; these sherds comprise 70.5% of the decorated sherds. Utility ware types that are found on East Texas Early Caddo sites (ca. A.D. 900-1200), such as Dunkin Incised and Crockett Curvilinear Incised, are present at the Chapman site, although other early utility ware types such as Weches Fingernail Impressed and Pennington Punctated-Incised are apparently absent. The remainder of the decorated sherds are from engraved fine ware vessels. The absence of brushed wares at the Chapman site, found in increasing percentages on later (post-A.D. 1200) Caddo sites in the area (see Walters 2008; Walters and Haskins 1998), would suggest that the Chapman site was primarily occupied earlier than ca. A.D. 1200 in the Caddo sequence in this part of East Texas.

On average, the utility wares at the Henry Chapman site are thicker (Table 3) than the fine wares, and about the same thickness as the plain wares. The utility wares usually have a coarser paste than the fine wares, and are mostly large jars with smoothed interior surfaces.

As our knowledge of prehistoric Caddo potters and the pottery they made increases, it is evident that they chose from a number of different techniques to achieve a desired effect when making and firing their wares. Like all learned activity, this process had temporal and spatial differences. Were there differences in, for instance, how utility and fine wares were fired at the Chapman site? At the Chapman site, 87% of the fine ware sherds came from vessels that were fired in a reduced atmosphere, and 13% are sherds from vessels fired in an oxidized atmosphere (Table 4). Of the plain wares, 81% of the sherds were

Table 3. Sherd Thickness.

All sherds	mean thickness (mm)
engraved rim	6.2
engraved body	5.4
punctated rim	7.4
punctated body	8.7
incised rim	7.4
incised body	7.8
punctated-incised rim	8.0
punctated-incised body	7.6
plain rims	7.6
plain body	9.0
bases	11.1
Average thickness for	
all sherds (excluding 10 bases)	7.5 mm

fired in a reduced atmosphere and only 19% were from vessels fired in an oxidizing atmosphere. The utility wares were fired in much the same manner, as 78% of the utility ware sherds are from vessels that were fired in a reduced atmosphere and 22% of the sherds were from vessels fired in an oxidizing atmosphere. Of the 10 bases, eight (80%) were fired in a reduced atmosphere and two (20%) were fired in an oxidizing atmosphere. At the Chapman site, then, the Caddo potters employed similar firing techniques for all pottery wares that emphasized the firing of vessels in a low oxygen environment, probably smothered in a bed of coals.

The tempers used by the Caddo potters at the Henry Chapman site were determined by visual observation, or aided by a 10X hand lens, of fresh breaks along sherd cross-sections. Grog is the major tempering agent, occurring in almost 99% of the sherds (Table 5), primarily as the sole temper, or in combination with bone and/or hematite. In some of the thick utility wares, a coarse grog is so prevalent that the sherds have a coarse and crumbly texture. Bone in varying amounts is present in over 35% of the sherds, while crushed ferruginous sandstone, or hematite as it is commonly referred to in the literature, occur in 12.4% of the sherds but never in any significant amounts.

The fine wares (n=84) had 49% grog temper alone and 41% had bone and grog or bone alone.

Table 4. Firing conditions.

Decoration	Reduced	Oxidized	
Punctated	71	25	
Engraved	73	11	
Incised	60	14	
Punctated-incised	27	5	
Plain	127	30	
Bases	8	2	
Totals	366	87	
Percentage	81.0	19.0	

Plain wares (n=157) had 57% grog as the sole temper, compared to utility wares (n=202) that had 55% grog temper. Plain and utility ware pottery sherds had almost equal amounts of bone temper, 36% and 38% respectively, in combination with grog and hematite or as the sole temper (see Table 5).

Decorated sherds

Engraved wares (n=84)

The engraved sherds comprise almost 30% of the decorated sherds from the Chapman site; 55 are body sherds and 29 are rim sherds. The average sherd thickness for the engraved wares is 5.8 mm. The rim sherds are slightly thicker (6.2 mm) than the body sherds (5.4 mm) (see Table 3). This is probably a sampling error as most of the rims showed that wall thickness increases with wall vessel height, as is common in coil-constructed ceramics. With respect to surface treatment of the fine wares, 70% have interior and exterior smoothed surfaces, and 12% have a burnished surface; one sherd has an eroded surface.

There are 29 engraved rim sherds: 19 have Holly Fine Engraved design elements (Figure 6a-d) consisting of fine engraved lines in sets; six also have excised areas (Figure 6c-d). Six of the Holly Fine Engraved rims are from carinated bowls; the mean orifice diameter of these vessels is 18.5 cm. Nine of the rims have design elements similar to Hickory Fine Engraved; three are from bottles. Three of the Hickory Fine Engraved rims have parallel curved lines, one with red pigment (Figure 6h-i). Another from Feature 3 has broad (4.6 mm wide) horizontal excised lines with red pigment (Figure 6m). One engraved rim, thinned with a rounded lip, has a cross-hatched design (Figure 6e). Another rim, direct with a flattened lip that is slanted towards the inside of the vessel, has diagonal engraved lines (Figure 6g). Finally, one engraved rim has a diagonal ladder motif (Figure 6f)

Twenty-one (72%) of the 29 engraved rims are direct with rounded lips. Seven (24%) are direct with flat lips. One flat rim has a tear-dropped indentation on top of the lip. There is one everted rim form with a flat lip.

Of the 55 engraved body sherds, 17 are likely from Holly Fine Engraved vessels. These sherds have fine engraved lines in sets (some more finely executed than others), six have excised areas, and two have red pigment in the lines (see Figure 6n).

Table 5. Temper.

All sherds	Grog	Bone/ grog	Bone hematite	Bone/grog/ hematite	Grog/
Punctated	50	36	_	5	5
Engraved	41	29	5	_	9
Incised	41	17	_	2	14
Punctated-Incised	19	9	_	2	2
Plain body	79	40	_	3	10
Plain rims	11	10	_	1	3
Bases	8	2	-	-	-
Totals	249	143	5	13	43
Percentage	55.0	31.6	1.1	2.9	9.5

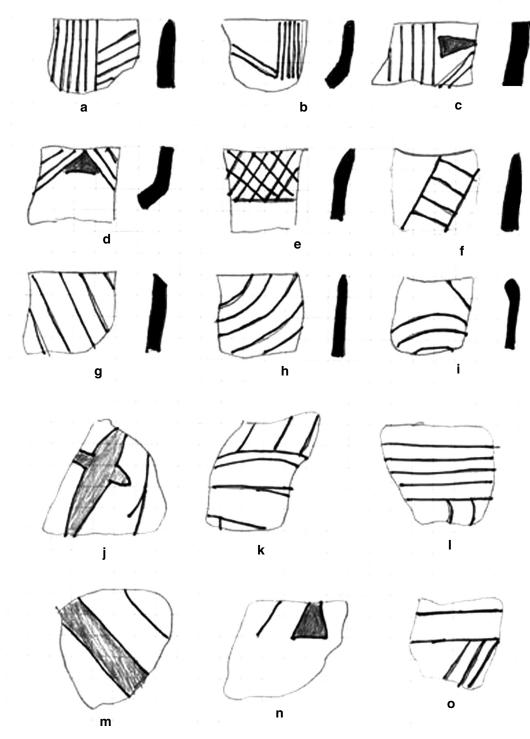


Figure 6. Selected engraved rim and body sherds: a-d, n, Holly Fine Engraved; e, cross-hatched zone; f, diagonal ladder engraved motif; g, diagonal engraved lines; h-i, m, Hickory Fine Engraved; j, excised cross-shaped element; k-l, parallel and curvilinear lines.

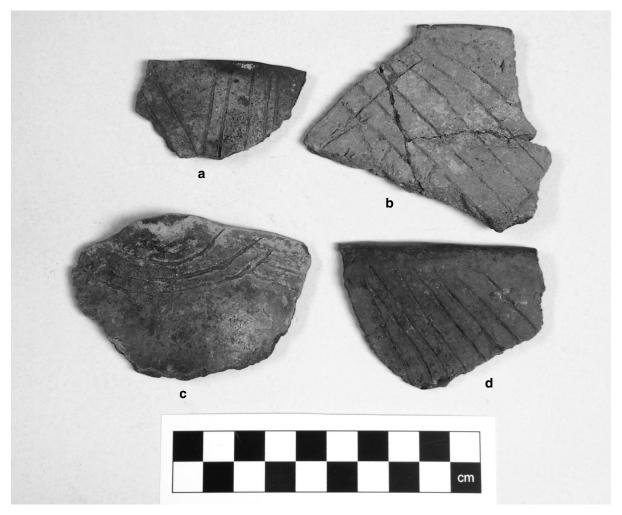


Figure 7. Incised rim sherds: a-b, d, multiple diagonal or diagonal opposed incised lines; c, horizontal incised and a lip tab.

Nine are from carinated bowls. Eight Hickory Fine Engraved sherds, six of which are from bottles, represent the other recognizable type in the fine wares. Other design elements are 13 sherds with multiple curvilinear lines and nine sherds with multiple straight engraved lines. There are three body sherds with single straight engraved lines and one with a single curvilinear line. Three sherds had opposing straight lines (see Figure 6o). One engraved body sherd has curvilinear lines with opposing engraved lines (see Figure 6k), and another has parallel engraved lines with opposing lines (see Figure 61). Finally, there is a body sherd with an excised "cross-shaped" element with red pigment (see Figure 6j). Differing from later Caddo ceramic styles in the region, the engraved fine wares from the Henry Chapman site seldom used an upper or lower line on the rim marking the limits of the motif.

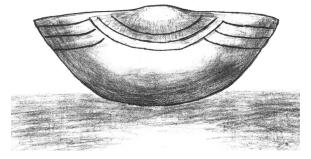


Figure 7e. Drawing of reconstructed horizontal incised and lip tab vessel.

Incised rims (n=23)

Twelve of the incised rim sherds have multiple, diagonal, straight incised lines (Figure 7a-b, d), while

one sherd has a single diagonal line. One rim with diagonal lines, from N75-80 E0-5, 0.5-1.0 ft. bs, had been re-fired. Three other incised rims have horizontal lines; another has a single horizontal line under a rolled-out lip. These horizontal incised sherds are probably from Davis Incised vessels, a common type found in early Caddo ceramic assemblages.

One incised rim (N70-90 W0-5) from a bowl had a thickened rim tab with three horizontal lines that dipped underneath the tab (see Figure 7c, e). The sherd is grog-tempered and has been fired in a reduced atmosphere and cooled in the open air. The exterior and interior surfaces are burnished. The rim is direct and has a round lip; its orifice diameter is 20 cm, and it is 6.4 mm thick.

Two incised rims have cross-hatched lines. Four other rims have either opposing straight lines (n=2), opposing curved lines (n=1), or opposing diagonal incised lines (n=1).

Thirteen of the incised sherds (57%) have direct rims, mainly with rounded lips. As previously mentioned, one of these direct rims has a lip tab (see Figure 7c); two have exterior folded lips and are smoothed. Ten have direct rims with flat lips. The average thickness of the incised rims is 7.4 mm (see Table 3), with a thickness range from 5.4-10.8 mm.

Incised Body Sherds (n=50)

Thirty-four incised body sherds have parallel straight lines as decoration. Two of these are from vessels that had been refired (one from N105-110 E30-35, 0-0.5 ft. bs; the other from N70-90 E 0-5, no depth). On one of these sherds, a hollow reed was employed to make the incised lines.

Another of the incised body sherds, with a portion of the base attached, had vertical straight lines. Seven have opposing incised straight lines, one forming a chevron design. Seven incised body sherds have a single straight line. One sherd has a cross-hatched element on a thickened portion of the sherd. None of the incised sherds from the Chapman site had obvious overhanging lines, a characteristic attribute of Coles Creek Incised (Phillips 1970:70-76), a Lower Mississippi Valley type that is occasionally found on early Caddo sites.

The incised body sherds have an average thickness of 7.84 mm (see Table 3). Forty-six sherds (92%) have smoothed exterior and interior surfaces. Five sherds have exterior burnished surfaces below the incised decoration and interior smoothed surfaces.

Punctated Rims (n=7)

Three of the punctated rims have random tool punctates (Figure 8a-b), three have randomly placed fingernail punctates, and one rim has horizontal rows of tool punctates. Five rims have direct rim profiles and flat lips. One rim has a direct profile and a round lip, while the other punctated rim is everted in profile with a round lip. Average thickness of the punctated rims is 7.4 mm (see Table 3).

Punctated Body Sherds (n=89)

More than 85% of the punctated body sherds have random fingernail punctates (see Figure 8c-d) that appear to have covered the vessel body. Seven others have random tool punctates (7.9%), five have rows of tool punctates (6.3%), and one (1.1%) has rows of fingernail punctates. Average thickness of the punctated vessel body sherds is 8.7 mm, but with a range of 4.3-14.7 mm.

Punctated-incised Rims (n=16)

Eight of the punctated-incised rims from the Henry Chapman site have opposed diagonal lines that form triangular areas that are filled with tool punctates (Figure 9a-b, d). One of these also has a diagonal incised panel filled with tool punctates adjacent to one of the triangular punctated-filled areas (Figure 9a). Five rims have parallel diagonal lines arranged in opposite directions, forming triangles that are instead filled with fingernail punctates. Another punctated-incised rim has opposing straight lines on the rim and random fingernail punctates on the body section; this sherd had been exposed to extreme heat as evidenced by a crazed surface. One rim has vertical parallel lines separating a zone of random fingernail punctates. Finally, there is one rim with curvilinear parallel incised lines and zones of random tool punctates (Figure 9c). The decorative elements on this sherd resemble those documented for Crockett Curvilinear Incised ceramic vessels. This ceramic type is found in association with early Caddo fine ware types such as Holly and Hickory Fine Engraved (cf. Suhm and Jelks 1962).

Twelve punctated-incised rims are from jars. Seventy-five percent of the punctated-incised rims have direct rim profiles with round lips. Three are direct with flat lips and one punctated-incised rim has an everted rim profile with a round lip. The average thickness of the punctated-incised rims is 8.0 mm (see Table 3).

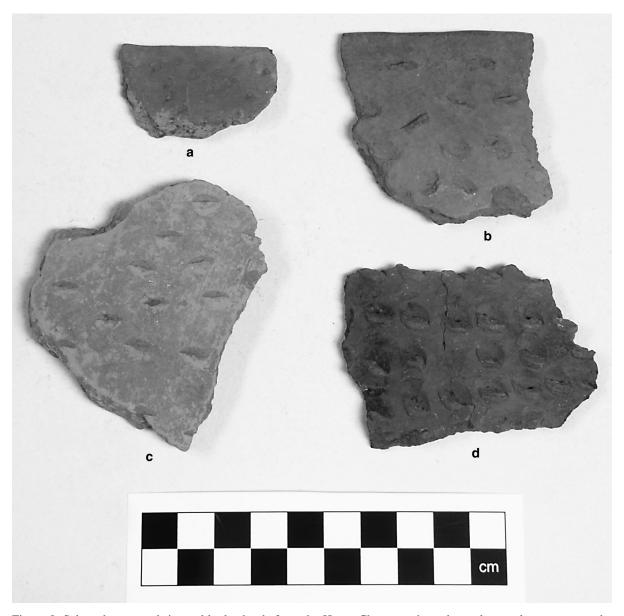


Figure 8. Selected punctated rim and body sherds from the Henry Chapman site: a-b, random tool punctates on the vessel rim; c-d, random fingernail punctates on the vessel body.

Punctated-incised body (n=16)

Five punctated-incised body sherds have opposing parallel straight lines separating zones of random fingernail punctates. Two sherds have parallel straight lines separating zones of fingernail punctates; two sherds have straight lines separating zones of reed punctates; one sherd has diagonal parallel straight lines separating a zone of fingernail punctates; and six sherds have curvilinear lines, four separating zones with fingernail punctates, and two with tool punctates.

One punctated-incised body sherd with reed punctates (N135-140 E30-35, depth 1.0-1.5 ft. bs) can be differentiated from the majority of the sherds from the Chapman site. The sherd is heavily grog-tempered, is from a vessel fired in a reduced atmosphere, and is 5.5 mm thick. It is decorated with a broad well-defined straight incised line bordering a row of well executed reed-like punctates. The design is similar to Evansville Punctated, *var. Rhinehart*, a Lower Mississippi Valley ceramic type that dates to the Coles Creek period (Phillips 1970:80-81).



Figure 9. Punctated-Incised rims: a-b, d, triangular incised areas filled with tool punctates; c, curvilinear incised and random tool punctated zone.

Plain Wares

Plain rims (n=25)

The average thickness of the plain rims from the Henry Chapman site is 7.6 mm (see Table 3). Eight are direct rims with flat lips and 17 are direct rims with round lips; one of these is a bottle neck rim with an orifice diameter of 4 cm. One of the plain rims is from a carinated bowl with an orifice diameter of 24 cm. There is also a large plain jar rim from Feature 1.

Plain body sherds (n=132)

There are 132 plain body sherds from the Henry Chapman site. The average thickness of the body sherds is 9.0 mm (see Table 3). Almost 69% have smoothed interior and exterior surfaces, and 30.4% have burnished surfaces; one sherd has a burnished interior and smoothed exterior surface.

Ten plain sherds are from bottle necks. All had smoothed exterior surfaces and rough interior surfaces. The average thickness for these bottle sherds is 6.4 mm. All of the bottle necks are cylindrical to slightly tapered toward the mouth.

Bases (n=10)

All of the bases are flat, and thicker in the middle than along the edges. The average base sherd thickness is 11.1 mm (see Table 3), but with a range of 6.4-15.6 mm. Six of the bases have straight walls leading from the base, and two of these have very abrupt angles. The remaining four bases have body walls that slope at an angle away from the base, such that the base is smaller in diameter than the body of the vessel.

Whole/partial vessels

Seven whole or partial vessels were found in the excavations at the Henry Chapman site. Four of these vessels are from Feature 1, one is from Feature 4, and the other two were not uncovered from feature contexts.

Vessel 1, N75 W4, 1 ft. bs

Form: It is a jar that is approximately 25% complete (see Figure 2). The vessel was warped, possibly from being damaged before final firing and still in a leather stage, then subjected to extreme heat such as would occur in a house fire.

Temper: Grog.

Rim-lip profile: Direct rim with a rounded lip.

Firing: Oxidized.

Color: grayish-brown on both interior and exterior surfaces.

Thickness: rim, 7.0 mm, body, 12.0 mm, base, 11.0 mm.

Surface treatment: Interior surface smooth, exterior surface blistered from intense heat.

Height: 18.0 cm

Rim: Parallel and opposing incised lines. Body: tool punctates in uneven rows.

Vessel 2, Feature 1

Form: Large plain jar with a portion of the rim,

body, and base.

Temper: Bone and grog.

Rim and lip profile: Direct rim with a flat lip.

Firing: Fired in a reduced atmosphere.

Interior surface color: very dark gray (10YR3/1).

Exterior surface color: brown (7.5YR4/2). Surface treatment: Both exterior and interior sur-

faces have been smoothed.

Thickness: rim, 8.0 mm, body, 11.8 mm, base, 13.9 mm; the base is 13.0 cm in diameter.

Vessel 3 (Figure 10), Feature 1

Form: Portion of a large jar. Vessel height is 20.0 cm Decoration: Parallel and opposed diagonal incised lines around the rim, alternating in direction with intervening triangular spaces filled with tool punctates. There are horizontal incised lines at the top and bottom of the rim panel. Canton Incised.

Temper: Grog.

Rim-lip profile: Direct rim with flat lip.

Firing: undetermined

Color: The exterior and interior surfaces are a dark brown to a dark reddish-brown. Surface treatment: Both surfaces have been smoothed.

Thickness: rim, 6.3 mm, body, 8.0 mm, base, 14.0 mm.



Figure 10. Canton Incised jar from Feature 1.

Vessel 4 (Figure 11), Feature 1

Form: Represented by twenty-eight large sherds from a large jar.

Decoration: Long (2.2-3.9 cm) randomly spaced slash punctates across the vessel body that are up to 4.4 mm wide.

Temper: Bone/grog; crumbly texture. Rim and lip profile: Rim and lip are absent.

Firing: Fired in a reduced atmosphere and cooled in the open air.

Color: Interior color is a dark reddish-brown (5YR3/3). The exterior color is a very dark gray (7.5YR3/1)

Thickness: Body, 9.8 mm

Surface treatment: Interior and exterior surfaces

are smoothed.

Vessel 5 (Figure 12), Feature 1

Form: Bottle with much of the bottle neck, the rim, and lip missing. Height, 18.0 cm, neck height, 14.0 cm; the neck is slightly tapered. Base diameter, 8.5 cm

Decoration: Five horizontal engraved lines, poorly executed, at the junction of the neck and the body. Below the bottom horizontal engraved line are a series of pendant excised triangles surrounded by engraved outlines. The engraved decoration appears to be a variant of Hickory Fine Engraved (Suhm and Jelks 1962:71-72).

Temper: Grog.

Color: Exterior color is a grayish-brown with fireclouding; interior color is a light grayish-brown. Firing: undetermined.

Thickness: Neck, 5.5 mm, body, 6.7 mm, base, 10.0 mm

Surface treatment: Exterior surface is burnished.

Vessel 6: Jar from Feature 4 (see Figure 5) Form: Jar; Height: 20.5 cm. Orifice diameter: 19.2 cm. Base diameter: 10.0 cm.

Decoration: The rim is decorated with diagonal opposed incised lines, creating a series of incised triangles. The body is covered with four repeating panels of diagonal incised lines separated by vertical incised lines. Dunkin Incised (Suhm and Jelks 1962:37-38).

Temper: Grog.

Rim and lip profile: Direct rim with a flat lip. Color: Interior color ranges from a dark brown to a light brown with fire clouding. Exterior color is a light reddish-brown to dark brown with fire clouding.



Figure 11. Large jar with slash punctates from Feature 1.

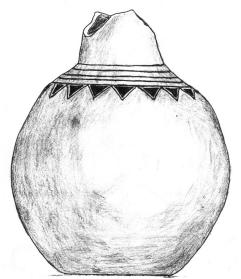


Figure 12. Engraved bottle from Feature 1 at the Henry Chapman site.

Firing: undetermined.

Thickness: rim, 5.0 mm, body, 5.0 mm, base, 8.0 mm

Surface treatment: Interior and exterior surfaces have been smoothed.

Vessel 7: Plain jar from N105-110 E 25-30, Depth 0-1 ft. bs. The partial vessel was from a general level context with no mention of any pit feature. Form: Large jar; Orifice diameter: 40.0 cm

Decoration: plain

Temper: Grog/hematite; crumbly texture Rim and lip profile: Direct rim with a flat lip.

Color: Exterior and interior coloring is a very dark

gray (7.5YR3/1). Firing: Reducing

Thickness: rim, 8.9 mm, body, 10.8 mm.

Surface treatment: Interior/exterior surfaces have

been smoothed.

Instrumental Neutron Activation Analysis of Caddo Pottery from the Henry Chapman site

Two decorated sherds, one a Holly Fine Engraved sherd, from the Henry Chapman site were analyzed by instrumental neutron activation analysis (INAA) at the University of Missouri Reactor Center. The results show that both sherds are from vessels made from local clay sources, as they were assigned to the Titus chemical reference

group (Descantes et al. 2003; Perttula 2002). These findings should be considered preliminary until reanalysis of the entire Caddo INAA database, currently underway, is completed.

Mud dauber nests

Two mud dauber nests were recovered in the excavations at the Henry Chapman site. They are from two different parts of the site, suggesting there are burned structures in both locations.

Lot 35, N70-90 E0-5, depth, 1.33 ft. bs. This is a yellowish-brown fired mud dauber nest from a possible burned house. There are grass and cane impressions on one side. Length, 5.5 cm, width, 4.0 cm, and thickness, 3 cm.

Lot 1, N140 E45-50, depth 1.5-2.0 ft. bs. Dark brown fired mud dauber nest. Length, 2.4 cm, width, 1.2 cm, thickness, 1.1 cm.

Daub

Only three pieces of daub are in the collections from the Henry Chapman site. Perhaps the structures at the site did not have a wattle and daub covering.

Lot 220, N95-100 E40-45, depth 0-1 ft. Fired clay, smooth one side, while the opposite side has grass/cane impressions; very hard. It is reddish-yellow (7.5YR7/6) in color. Length, 38.3 mm, width, 32.8 mm, thickness, 19.1 mm.

Lot 1146, N135-140 E15-20, depth 1.0-1.5 ft bs. Very hard and light brown fired clay piece with small cane/stick impressions on one side. It was found in the soil zone above Feature 3, the cremation.

Lot 6, N145-150 E45-50, depth 1.0-1.5 ft. bs. One piece of daub with a sandy paste and hematite inclusions; it is soft and gritty. There are grass impressions on one side, while the other side is not smoothed.

Lithic Artifacts

There were not many lithic artifacts recovered from the excavations at the Chapman site. This could be due to the lack of screening of the archaeological deposits and/or the size of the mesh on the screen used in the excavations. It is possible, however, that the Chapman site may be similar to other Caddo sites in the area that do not have an abundance of lithic materials (Walters 2008). This paucity of lithic artifacts may be a product of an increasing reliance on agriculture by the Caddo at the time of

the site occupation, and thus less hunting activities requiring stone tools, or simply changing technologies (i.e., increased use of bone and wood tools). Furthermore, not all of the lithic artifacts recovered from the Chapman site can be associated with any certainty with the Caddo occupation. Certainly the dart points, such as the Kent point, are associated with Late Archaic and Woodland period occupations in East Texas. Most favorable landforms in East Texas usually have evidence of repeated occupations through time.

Chipped Stone tools

There are 14 chipped stone tools in the Henry Chapman site lithic assemblage. They include bifaces (n=1), a bifacial scraper (n=1), dart point (n=3), arrow point (n=1), flake tools (n=5), perforator (n=1), and a blade tool (n=1). Lithic raw materials used in the manufacture of the tools include quartzite (n=4), petrified wood (n=1), brown chert (n=1), gray chert (n=2), light gray chert (n=2), light grayish-brown chert (n=1), dark gray chert (n=1), black chert (n=1), and a yellowish-brown chert (n=1).

- 1. Lot 518, N80-85 W15-20, 0.5-1 ft. bs. Biface, with retouching flakes around the edge of the tool. Red quartzite. Length, 52.5 mm, width, 22.8 mm, thickness, 7.2 mm.
- 2. Lot 586, N135-140 E30-35, 1.5-2 ft. bs. Bifacial scraper, with a slanting bit-like face on one side. Gray quartzite. Length, 43.7 mm, width, 35.1mm, thickness, 10.2 mm.
- 3. Lot 447, N75-80 E5-10, 1.5-2 ft. bs. Dart point base, square with an impact fracture. Gray quartzite. Length, 18.6 mm, width, 26.9 mm, thickness, 7.8 mm.
- 4. Lot 1112, N80 E19, 2.5 ft. bs (in gopher pocket). Dart point, with weak shoulders and a convex base. Kent type. Light grayish-brown chert. Length, 42.2 mm, width, 14.5 mm, thickness, 7.6 mm.
- 5. Lot 76, N45-50 E0-5, depth 0-1 ft. bs. Dart point with an impact fracture one face. Petrified wood. Length, 20.1 mm, width, 31.7 mm, thickness, 6.0 mm.
- 6. Lot 82, N45-50 E0.5, depth 0-1 ft. bs. Unifacial arrow point on a flake with edge retouch

- flake scars; the base is missing. Light brown (7.5YR6/3) chert with white inclusions. Length, 18.8 mm, width, 14.0 mm, thickness,
- 7. Lot 202, N110-115 E35-40, depth 0-1 ft. bs. Uniface flake tool. Gray (10YR5/1) chert, with a small spot of cortex on one edge. Length, 25.7 mm, width, 23.4 mm, thickness, 5.2 mm.
- 8. Lot 403, N110-115 E10-15, depth 0-0.5 ft. bs. Bifacial flake tool with a snap fracture on one edge. Glossy dark gray chert (heat treated).
- 9. Lot 553, N130-135 E30-35, depth 1.0-1.5 ft. bs. Perforator that is flaked on both sides of the tool. Glossy black chert (heat treated). Length, 36.7 mm, width, 17.3 mm, thickness, 4.9 mm.
- 10. Lot 2, N140-145 E45-50, depth 1.0-1.5 ft. bs. Unifacial flake tool from a primary flake. There are retouch pressure flakes on one side of the tool. The cortex color is a strong brown (7.5YR4/6), and the interior color is a yellowish-brown (10YR5/6). Length, 37.7 mm, width, 20.3 mm, thickness, 7.6 mm.
- 11. Lot 629, N125-130 E30-35, backfill. Flake tool from a secondary chert flake. Pressure flake scars on one edge, and a snap fracture on one edge. Cortex is a brown (7.5YR5/3) color, but the interior color is gray (7.5YR6/1). Length, 51.5 mm, width, 26.8 mm, and thickness, 9.8 mm.
- 12. Lot 6, N145-150 E45-50, depth 1.0-1.5 ft. bs. Flake tool from a secondary chert flake, and pressure flaking on one end. Brown cortex, light gray interior. Length, 32.9 mm, width, 19.5 mm, thickness, 7.5 mm.
- 13. Lot 12, N135-140 E45-50, depth 1.0-1.5 ft. bs. A utilized blade from a secondary chert flake, with a snap fracture on one end. It has a brown cortex with a light gray interior. Length, 35.4 mm, width, 13.2 mm, thickness, 3.6 mm.
- 14. Lot 1139, N50-55 E10-13, depth-1.0-1.5 ft. bs. A bifacial flake tool made from a secondary red (2.5YR5/8) quartzite flake.

Chipping debris

There are 19 pieces of chipping debris in the collection: 10 with cortex and nine interior or non-cortical flakes. Eight of the flakes fall in the 2.54 cm size class, 10 fall in the 1.27 cm size class, and one belongs to the 0.64 cm size class.

Twelve of the flakes are chert (five gray, two grayish-brown, two light brown, one dark gray, one red, one gray/red inclusions), and there is one white novaculite flake. Three others are quartzite flakes (two gray and one red), and there are also two hematite flakes, and a milky quartz flake.

Cores/tested cobbles

The cores include exhausted cores and tested cobbles of chert (n=3) and quartzite (n=2).

- 1. Lot 1, N70-90, W0-5, 0-1 ft. bs. Red chert exhausted core with multiple flake scars. No cortex is present. Length, 28.5 mm, width, 23.3 mm, thickness, 15.0 mm.
- 2. Lot 775, N130-140 E35-40, 1.5-2 ft. bs. Gray chert exhausted core. Multiple flake scars and no cortex remaining. Length, 34.1 mm, width, 25.0 mm, thickness, 18.5 mm.
- 3. Lot 3, N70-90, W0-5, 0-1 ft. bs. Gray quartzite core with cortex remnants. Flake scars are present on both sides of the core. Length, 37.1 mm, width, 25.0 mm, thickness, 18.0 mm.
- 4. Lot 12, N70-90, W0-5, 0-1 ft. bs. Chert cobble core with two flake scars. Cortex is a yellowish-red (5YR5/6), and the interior color is a reddish-gray (5YR5/2). Length, 22.7 mm, width, 22.0 mm, thickness, 14.4 mm.
- 5. Lot 2, N70-90, W0-5, 0-1 ft. bs. Round quartzite tested cobble with one flake scar. Very pale brown (10YR7/4). Length, 70.0 mm, width, 60.0 mm, thickness, 39.0 mm.

Ground Stone tools

The ground stone tools at the Henry Chapman site include five celts and three abraders.

1. Celt. Lot 39, N77 W4, 0.67 ft. bs. Graywacke sandstone, dark olive gray (5Y3/2). Length, 88.8 mm, width, 49.2 mm, thickness, 41.3 mm. The celt was complete, and the bit section is polished. The amount of polishing decreased away from the bit to the battered poll end (Figure 13b).

- 2. Celt. Lot 913, N130-140 E25-30, depth 0.5-1.0 ft. bs. Reddish-black (2.5YR2.5/1) hematite. This is a complete tool showing chip marks on the bit and smoothing striation marks running parallel to the bit on the bit end and lengthwise on the body. The celt showed flake scars on the body from its manufacture. Length, 79.9 mm, width, 50.3 mm, thickness, 29.1 mm (Figure 13c).
- 3. Celt fragment. Lot 32, N70-90 E0-5, no depth given. Polished fragment with a portion of the bit. This celt was found in association with Celt # 1 and a fired mud dauber nest in a possible burned house. Very dark gray (5Y3/1) sandstone. Length of the fragment, 39.4 mm, width, 47.2 mm, thickness, 8.0 mm.
- 4. Celt fragment. Lot 485, N65-70 E5-10, 0-0.5 ft. The celt fragment has part of the polished bit end, but not the actual bit, and the remainder of the fragment has been smoothed. Dark olive gray (5Y3/2) sandstone. Length of the fragment, 61.0 mm, width, 49.7 mm, thickness, 10.3 mm (Figure 13a).
- 5. Celt fragment. Lot 587, N135-140 E30-35, 1.5-2.0 ft. bs. Polished section of a celt with a portion of the bit. Polished striations run length-wise down the body of the celt. Olive gray (5Y4/2) sandstone. Length of the celt fragment, 33.6 mm, width, 20.6 mm, thickness, 6.7 mm.
- 6. Sandstone abrader. Lot 237, N100-105 E25-30, 0-1 ft. bs. The abrader is made from a soft red (2.5YR4/6) ferruginous sandstone. There are two parallel grooves, 7.1 mm wide, on one surface. The opposite side has a concave smoothed surface.
- 7. Sandstone abrader/pigment rock. Lot 517, N80-85 E15-20, 0.5-1 ft. bs. The abrader/pigment rock is made from a fine-grained soft red (10R4/6) sandstone. One side has shallow parallel grooves, while the opposite side has two parallel grooves that are 3.0 mm wide that resulted from its use as an abrader. Around the edges of the tool are fine cut marks where materials were collected for pigments.
- 8. Sandstone abrader. Lot 33-34, N70-90 W0-5, 0.83 ft. bs. Catahoula sandstone outcrops in portions of East Texas and Northwest

Louisiana and occurs in Tertiary age rocks as a whitish tuffaceous sandstone. This abrader from the Chapman site is made from a coarse, white (10YR8/1), Catahoula sandstone and it is broken in two pieces. One side has multiple grooves that are up to 15.0 mm wide and 7.0 mm deep. One groove is V-shaped, 10.4 mm wide, and 5.0 mm deep. The opposite side has two shallow parallel grooves. This abrader was found in association with Celt #1 and #3 and a mud dauber nest in a possible burned house.

Animal bone

Mr. Whiteside's journal lists the following entries for animal bone:

• Lot 516 N75-80 E0-5, 0-0.5 ft. bs. Charred animal bone from Feature 2. Collected March 28, 1958 and delivered to Archeological Museum, U.T., August 21, 1958. (TARL records indicate they were discarded on August 21, 1969, without analysis).

- Lot 815 N130-140 E35-40, 2.5-3.0 ft. bs. No description.
- Lot 820 N140-150 E35-40, 0-0.5 ft. bs. No description.
- Lot 5 N145-150 E45-50, 0.5-1.0 ft. bs. No description.
- Lot 6 N145-15- E45-50 1.0-1.5 ft. bs. No description.
- N140-150 E35-40 0-0.5 ft. bs. • Lot 820 Unburned large mammal (8.6 x 1.8 x 6.1 cm)

Animal bone without lot numbers included in the Chapman collection include: 10 fractured large mammal long bones, three of which were burned; one fractured long bone from a large bird; one unburned deer vertebra; nine deer teeth; and five fractured small mammal bone, two that had been burned.



Figure 13. Celts from the Chapman site: a, sandstone celt; b, graywacke sandstone celt; c, hematite celt.

Possible human bone and Reported human bone

There are nine unburned and possible human cranium fragments in the collection, measuring up to 4.3 mm in thickness. None of these have provenience information. Two lot numbers have human remains: Lot 1147 (Bone Burial 2, Feature 5) and Lot 1148 (cremation bone, Feature 3).

COMPARISONS TO EARLY CADDO MOUND CENTERS AND HABITATION SITES IN EAST TEXAS

As time is paramount to the science of archaeology, placing the Chapman site in some chronological order is essential to understanding the archaeological record of the site and the Caddo settlement of this area. Certain ceramic styles associated with the Alto phase are present at the Henry Chapman site. It would be tempting to use that association to identify the Chapman site as a component of the early Caddo [Alto phase] as defined at the George C. Davis site. However, Story reiterates "components of this phase [Alto] are no where common even though some of the diagnostics, such as Weches Fingernail Punctated and Holly fine Engraved, have wide distributions" (Story 2000:20). Again, based on the artifacts recovered from Mr. Whiteside's excavations at the Chapman site, the main occupation at the site would seem to occur during the Early Caddo period (ca. A.D. 1000-1200), but during what part of the Early Caddo era can only be answered by more absolute dates. At the Chapman site, there is no evidence of the stylistic diversity that characterizes the fine ware ceramics characteristic of the Middle Caddo period (ca. A.D. 1200-1400), nor are there increasing percentages of brushing on utility wares. However, alternatively, groups in the Prairie Creek area may have held on to local ceramics traditions while other contemporaneous Caddo groups changed their ceramic styles, or else chose not to decorate their utility wares with brushing.

There are a few sites, either mound centers or habitation locales, known in Early Caddo times that provide some relevant comparisons with the archaeological record from the Henry Chapman site. I begin with mound centers.

Early Caddo mound centers

There are three known Early Caddo mound centers in the general area of the Henry Chapman

site. It is not know if the Chapman site was contemporaneous with any of these ceremonial centers but the Chapman site does have ceramics that are similar to some of those found at these locations.

The Boxed Springs site (41UR30) is some 28 km to the north of the Chapman site on the Sabine River. This is an Early Caddo (ca. A.D. 900-1200) multiple mound center that was recorded and partially investigated by Sam Whiteside in the early 1960s (Perttula et al. 2000). Artifacts from excavations and from a cemetery looted in the 1980s include Holly Fine Engraved and Hickory Fine Engraved, Spiro Engraved, Coles Creek Incised, Weches Fingernail Impressed, Kiam Incised, East Incised, Crenshaw Fluted, and Crockett Curvilinear Incised vessels.

Engraved wares at the Hudnall-Pirtle site (41RK4), an early Caddo mound center on the Sabine River some 48 km to the east of the Chapman site, included examples of both Holly and Hickory Fine Engraved but it was noted that not all of the engraved decorations represented "fine engraved" lines but rather the lines were described as being thicker and generally coarser (Bruseth and Perttula 2006:90-91); this was not the case with the Hickory and Holly Fine Engraved sherds from the Henry Chapman site. Other Early Caddo pottery types noted at the Hudnall-Pirtle site were Davis Incised, Dunkin Incised, Weches Fingernail Impressed, Pennington Punctated-Incised, and Crockett Curvilinear Incised. There were also sherds similar to Coles Creek Incised, var. Coles Creek and var. Hardy. There were six pipe fragments from long-stemmed Red River pipes recovered from excavations at the site. A total of 93 projectile points were recovered at the Hudnall-Pirtle site. The main arrow points include: Alba (42%), Catahoula (12.5%), Steiner (10.4%), and Colbert (10.4%) (Bruseth and Perttula 2006).

The George C. Davis site (41CE19), some 85 km to the south of the Chapman site, is one of the better dated/investigated Early Caddo mound centers in East Texas. Dates at the Davis site indicate the Alto phase occupation here dated from the late A.D. 800s to A.D. 1300. Dee Ann Story (2000), in the introduction to the classic *The George C. Davis Site, Cherokee County, Texas* report, defines the Alto phase based on the following co-occurring ceramic types: Holly Fine Engraved, Weches Fingernail Punctated, Davis Incised, Crockett Curvilinear Incised, Pennington Punctated Incised, Dunkin Incised, and Duren Neck Banded. Less diagnostic, but commonly present on Alto phase sites, are Hickory Fine Engraved ceramics, pinched ridge pottery,

long-stemmed Red River pipes, Alba arrow points, Gahagan bifaces, petaloid celts, and expedient tools made on flakes. Story (2000) contends that this phase, found in both mound centers and small habitation sites across a large area, represents the first distinctively Caddo remains in the middle Sabine and Neches river basins.

Local Caddo habitation sites

Compared to later Caddo sites, habitation sites with Early Caddo ceramics, such as are found at the Henry Chapman site, are scarce in this area of East Texas. Story (2000) suggests that the local region was not heavily populated at this time.

The Wolf site (41SM195), a small Caddo habitation site located on a nearby drainage to the Chapman site, has radiocarbon and OCR dates indicating a mid-fourteenth century occupation (Walters 2003). Significantly, however, the ceramic assemblage from this site lacks brushed pottery, as does the Henry Chapman site ceramic assemblage. Decorative techniques in the ceramics from the Wolf site include: punctated (52.4%), engraved (29.5%), incised (14.3%), and punctated-incised (3.8%). There is one engraved sherd similar to Holly Fine Engraved with excised areas, nested excised triangles, and red pigment in the lines. There were no ceramic pipes recovered from the Wolf site.

The Broadway site (41SM273), located some 24 km to the west of the Chapman site, has evidence of an early Caddo occupation dating ca. A.D. 900-1000 based on radiocarbon dates and the presence of small amounts of sherds from Holly Fine Engraved, Weches Fingernail Punctated, Dunkin Incised, as well as Crockett Curvilinear Incised, and long-stemmed Red River pipe sherds (Perttula and Nelson 2004). Perttula and Nelson (2004) surmised that the early Caddo occupation at the Broadway site was contemporaneous with, and that perhaps there was some level of contact/interaction between, the Caddo groups that occupied the George C. Davis site, but that the Caddo living at the Broadway site were part of a different social group.

Also located in Smith County is the Joe Meyers site (41SM73) in the Neches River basin, where members of the East Texas Archeological Society recovered Alto phase ceramics from habitation areas and burials (Johnson 1961). The Meyers site was the only one of 34 ceramic site in the Lake Palestine project area that contained early Caddo ceramic types (Jelks 1958).

The burials at the site included six single burials and one multiple burial that contained the remains of probably four individuals. Fifteen vessels were associated with the burials, including Bowles Creek Plain, Hickory Fine Engraved, Weches Fingernail Impressed, and Canton Incised (Jelks 1958). Surface collections from the site had sherds from the following early Caddo ceramic types: Hickory Fine Engraved, Davis Incised, Dunkin Incised, Canton Incised, and Weches Fingernail Impressed.

The six Weches Fingernail Impressed sherds were all rims with flat lips. A description of the ceramic type Weches Fingernail Impressed describes the lips as being rounded and flat in about equal numbers (Suhm and Krieger 1954:364). Thirteen plain rims from the Myers site were also described as being flat. At the Henry Chapman site 34 (34%) of the 100 rim sherds had flattened lips.

Interestingly, Jelks (1958) noted that stone material was not common at the Meyers site, a situation similar to the material culture at the Henry Chapman site.

To the east in adjoining Gregg County are two habitation sites that have Alto phase artifacts (Jones 1957). Grace Creek #1 (41GG33) was a probable Caddo habitation site with Alto phase ceramics (n=593) and arrow points (n=83), of which 76 were of the Alba type. From Grace Creek #1, Jones recovered sherds of Davis Incised (n=49), Dunkin Incised (n=19), Crockett Curvilinear Incised (n=4), Hickory Fine Engraved (n=2), Holly Fine Engraved (n=1), Pennington Punctated-Incised (n=1), and Weches Fingernail Impressed (n=4). Jones (1957:Figure 51g-h) listed two sherds as examples of Dunkin Incised, but they are clearly a Lower Mississippi Valley type seen in pre-A.D. 1050 contexts in the Caddo area: Coles Creek Incised, var. Coles Creek.

Grace Creek #2 (41GG34) had a small amount of early Caddo material, including sherds, one Red River pipe stem, and one Alba arrow point. Early Caddo ceramic types collected were Weches Fingernail Impressed (n=2), Dunkin Incised (n=1), Davis Incised (n=1), and a Hickory Fine Engraved rim with a flat lip(n=1).

CONCLUSIONS

The Henry Chapman site was a prehistoric Caddo habitation site much like other Caddo sites in the northern part of Smith County, and in the Sabine River basin. These sites were probably occupied by kinship-related groups who cooperated in the gathering, production, and consumption of local resources. No evidence was obtained by Mr. Whiteside's investigations confirming the cultivation of domesticated crops such as maize but investigations at other nearby sites suggest that agricultural activities supplemented the hunting and gathering of native plants in the Caddo diet. Evidence of large utility vessels at the site is indicative of the change by Caddo peoples after ca. A.D. 850 from hunting-gathering to a more sedentary lifestyle with the storage of foodstuffs, including domesticated plants. Large carinated bowls present at the Chapman site would seem to indicate that feasting by Caddo living there also played a role in their social life.

Excavations at the Chapman site seem to indicate the presence of three or more permanently constructed houses, either all occupied at one time or more likely it is the case that they represent a sequence of houses. There is evidence that one or more of the houses may have burned, either by accident or intentionally. These houses, following the settlement pattern of other small farmsteads, probably were not occupied for more than one decade at a time, and thus if the houses represent sequential use, the Henry Chapman site may have been occupied overall for ca. 30 years.

There were two burials reported from the Chapman site, although only one of these was documented in any detail. This burial, Feature 3, was a partial cremation and contained no obvious grave goods. A single radiocarbon date from the burial indicates the burial took place somewhere between AD 1280-1440. Cremations of this type are atypical in Caddo mortuary traditions, although an early Caddo cremation has been reported from the Boxed Springs (41UR30) mound center on Big Sandy Creek near its confluence with the Sabine River. Artifacts in the grave fill in Feature 3 at the Henry Chapman site indicate that the burial took place during (or after) the principal Caddo occupation of the site. A date obtained from the burial appears to be anomalously too recent based on the ceramics recovered from excavations at the Chapman site.

In summary, the Henry Chapman site represents a local group of folks that lived in this part of East Texas between ca. A.D. 1000-1200 that are culturally different from other Caddo groups, although it appears to be linked to them in some fashion by direct contact or interaction. The Henry Chapman site may have been occupied by a certain local Caddo

group that held on to certain traditions (such as distinctive styles of decorations on ceramic vessels) longer than did contemporaneous groups, or they resisted changes in utility ware decorative styles (such as brushing on vessels), longer than groups in other areas. It is uncertain what the nature of the social and cultural glue was that held these scattered Caddo groups in this area together. Hopefully, studies of other Caddo sites investigated by Mr. Whiteside and others on Prairie Creek and surrounding drainages will shed more light on how the Henry Chapman site fits into Caddo cultural history.

REFERENCES CITED

Bruseth, James E. and Timothy K. Perttula, with contributions by Gayle J. Fritz and Bonnie C. Yates

2006 Archeological Investigations at the Hudnall-Pirtle Site (41RK4): An Early Caddo Mound Center in Northeast Texas. *Caddo Archeology Journal* 15:57-158.

Descantes, Christophe, Robert J. Speakman, and Michael D. Glascock

2003 Letter Report to Timothy K. Perttula with enclosed figures and tables, September 3, 2003. University of Missouri Research Reactor, Columbia.

Jelks, Edward B.

1958 Appraisal of the Archeological Resources of Blackburn Crossing Reservoir, Anderson, Cherokee, Henderson, and Smith Counties, Texas. A Project of the Inter-Agency Archeological Salvage Program. National Park Service. U.S. Department of the Interior.

Johnson, Leroy

1961 An Archeological Survey of Blackburn Crossing Reservoir on the Upper Neches River. Bulletin of the Texas Archeological Society 31:213-238.

Jones, Buddy C.

1957 The Grace Creek Sites, Gregg County, Texas. *Bulletin of the Texas Archeological Society* 28:198-231.

Perttula, Timothy K.

2002 Archeological Evidence for the Long-Distance Exchange of Caddo Indian Ceramics in the Southern Plains, Midwest, and Southeastern United States. In *Geochemical Evidence for Long-Distance Exchange*, edited by Michael D. Glascock, pp. 89-107. Bergin and Garvey, Westport, Connecticut.

Perttula, Timothy K. and Bo Nelson

2004 Woodland and Caddo Archeology at the Broadway or Kanduts'ah Kuhnihdahahdisa' Site (41SM273) on the City of Tyler-Lake Palestine WTP Project, Smith County, Texas. Report of Investigation No. 50. Archeological & Environmental Consultants, LLC, Austin.

Perttula, Timothy K., Diane Wilson, and Mark Walters An Early Caddoan Period Cremation from the Boxed Springs Mound Site (41UR30) in Upshur County, Texas, and a report on Previous Archaeological Investigations. Journal of Northeast Texas Archaeology

Phillips, Philip

12:31-71.

1970 Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955. Papers of the Peabody Museum of American Archaeology and Ethnology 60. Harvard University, Cambridge.

Story, Dee Ann

2000 Introduction. In The George C. Davis Site, Cherokee County, Texas, by H. Perry Newell and Alex D. Krieger, pp. 1-31. 2nd Edition. Society for American Archaeology, Washington, D.C.

Suhm, Dee Ann and Edward B. Jelks (editors)

1962 Handbook of Texas Archaeology: Type Descriptions. Special Publication No. 1, Texas Archaeological Society, and Bulletin No. 4, Texas Memorial Museum, Austin.

Suhm, Dee Ann and Alex D. Krieger, with contributions from Edward B. Jelks

1954 An Introductory Handbook of Texas Archeology. Bulletin of the Texas Archeological Society 25:1-

Walters, Mark

2005 A Profile in East Texas Archeology. Bulletin of the Texas Archeological Society 75:119-120.

Walters, Mark, with contributions from Leslie G. Cecil, Linda Scott Cummings, J. Phil Dering, Jeffrey R. Ferguson, Michael D. Glascock, Timothy K. Perttula, Lee Anna Schniebs, Harry J. Shafer, Jesse Todd, and Chester P. Walker

2008 Life on Jackson Creek, Smith County, Texas: Archeological Investigations of a 14th Century Caddo Domicile at the Leaning Rock Site (41SM325). Caddo Archeology Journal 17:1-114.

Walters, Mark, with contributions by Phil Dering 2003 The Wolf Site (41SM195), Smith County, Texas. Journal of Northeast Texas Archaeology 18:1-21.

Walters, Mark and Patti Haskins, with contributions by David H. Jurney, S. Eileen Goldborer, and Timothy K. Perttula 1998 Archaeological Investigations at the Redwine Site (41SM193), Smith County, Texas. Journal of Northeast Texas Archaeology 11:1-38.

Caddo Sherds from the Hudnall-Pirtle Site (41RK4) in the Buddy Jones Collection at the Gregg County Historical Museum

Timothy K. Perttula

INTRODUCTION

Buddy Calvin Jones, a resident of Longview, Texas, conducted excavations in 1958 and 1959 of an unknown extent at the Hudnall-Pirtle site (41RK4), a well-known and significant Early Caddo (ca. A.D. 900-1200) multiple mound center on a Sabine River alluvial terrace in Rusk County, Texas (Bruseth and Perttula 2006). The site is now owned by The Archaeological Conservancy as a Caddo archaeological preserve. Caddo sherds from the site are in the Jones collection curated at the Gregg County Historical Museum, and recently I had an opportunity to examine this collection. This paper puts the findings of that examination on record.

THE COLLECTIONS

Jones variously referred to the site as the Hudnall site, Easton, the Cherokee Bayou Mound, and the North Mound, and he has collections from each area, but they are all believed to pertain to what is now known as the Hudnall-Pirtle site. The work by Jones included Trenches A and B in a village area (the village area at the site covers ca. 60 acres, so unfortunately a more precise provenience of this material cannot be specified, nor is the size and depth of the trench known), an Area I in the North Mound (likely Mound C, see Bruseth and Perttula 2006:Figure 2), and a 1W trench in what he called the Easton or Cherokee Bayou Mound site.

Hudnall (accession nos. 03-08-810, Trench A, and 03-08-811, Trench B in village area, August and September 8, 1959, 03-08-814, Trench B [1-2 ft.], 03-08-815, Pottery Concentration)

The September 1959 Trench A excavations by Jones recovered 36 sherds, including three plain

rims and 19 plain body sherds. The incised sherds (n=5) from this area include one rim with at least two horizontal incised lines, a Davis Incised or Kiam Incised (cf. Suhm and Jelks 1962:Plate 45a, c-d) body sherd with very closely spaced parallel incised lines, two body sherds with widely-spaced parallel incised lines, and another sherd with a single straight incised line on it.

Four sherds from this work at Trench A have incised and punctated decorative elements. The first is from a Pennington Punctated-Incised carinated bowl and has incised triangles on the rim filled with circular punctations (cf. Suhm and Jelks 1962:Plate 61i); the second Pennington Punctated-Incised sherd is a rim with a broad diamond-shaped incised zone filled with cane punctations (cf. Suhm and Jelks 1962:Plate 61d). The other two incised-punctated sherds are from Coles Creek Incised, var. Coles Creek vessels (Brown 1998:9; Phillips 1970:70). These sherds have horizontal incised lines on the rim, with a row of triangular-shaped impressed punctations immediately below the lowest horizontal incised line. Bruseth and Perttula (2006:88-89 and Figure 27) recovered similar Coles Creek Incised sherds from several village areas at the Hudnall-Pirtle site.

The three remaining utility wares from Trench A have punctated decorations. A carinated bowl sherd has at least two rows of fingernail punctates on the rim panel, and a body sherd has a single row of tool punctates. The third is an interesting rim from a vessel with a scroll motif—similar to scrolls noted on some Crockett Curvilinear Incised vessels (cf. Suhm and Jelks 1962:Plate 17f-i)—that is executed solely with tool punctates rather than with incised scroll elements filled with punctations.

Trench A has two engraved fine ware sherds, both rims. The first is a well-executed Holly Fine Engraved sherd with closely-spaced vertical and diagonal sets of engraved lines divided by a large triangular excised area (cf. Suhm and Jelks 1962:Plate 39a-b, e, g, i). The second rim has a single horizontal engraved line under the lip and widely spaced opposed engraved lines on the rim panel.

The Trench B sherds were collected by Jones in August 1959 (Trench B village, Area 1, 10-30 inches). This is a diverse lot of 67 sherds and two ear spool sherds. The plain sherds include two rims and 44 body sherds, among them two body sherds from a bottle. One of the sherds in this collection is a plain sandy paste rim sherd, Goose Creek Plain, var. unspecified, indicative of some limited use of this locality in Woodland period times. Another sherd is from a rim peaked bowl jar that has horizontal brushing on the rim and a row of triangular tool punctates under the lip. Because brushed vessels are apparently only common in Caddo sites in this part of the Sabine River basin after ca. A.D. 1200, this particular sherd is evidence of use after that time; the recovery of two arrow points that resemble the Perdiz and Bassett points from the Well Pad village area also mark this transitory late use of the Hudnall-Pirtle site (Bruseth and Perttula 2006:102).

The utility ware sherds from the Trench B village include incised (n=5), incised-punctated (n=6), and punctated (n=5) sherds. Two of the incised sherds may be from Davis Incised vessels, as they have horizontal incised lines on the rim; one of these is a carinated bowl. Three other incised body sherds have closely-spaced parallel incised lines. The punctated body sherds have either tool (n=4) or fingernail punctates, either in rows or randomly placed across the vessel body.

The first incised-punctated sherd from the Trench B village is a Coles Creek Incised, var. Coles Creek body sherd with a row of triangular tool punctations below at least one horizontal incised line. The second has an incised triangle that is bisected with two closely-spaced vertical incised lines; there is at least one tool punctate within the incised triangle. Three others, all body sherds, have a straight (or triangular?) incised line adjacent to a zone of punctations, either tool (n=2) or cane (n=1). The last incised-punctated body sherd has at least two widely-spaced parallel (likely oriented horizontally around the vessel rim) incised lines with a single row of triangular-shaped tool punctations between the lines; these sherds are well represented in the larger Hudnall-Pirtle ceramic assemblage described by Bruseth and Perttula (2006:87 and Figure 26d).

Fine wares in this Trench B collection are limited to two Holly Fine Engraved sherds and a carinated

bowl rim with diagonal engraved lines. One of the Holly Fine Engraved sherds is from a carinated bowl (cf. Suhm and Jelks 1962:Plate 40a) and the other, with very closely-spaced engraved lines, is from a bottle (cf. Suhm and Jelks 1962:Plate 40g).

The clay ear spools are plain, from different sets (based on their different sizes), with pronounced flanges along the exterior edges of the spool itself. Virtually identical Early Caddo style ear spools were found in village areas by Bruseth and Perttula (2006:Figure 29d-e).

There are only two sherds from accession no. 03-08-814, Trench B, at the Hudnall locality. One of these is a plain body sherd, while the other may have a poorly preserved stamped (?) decoration with parallel incised lines that cross over the stamping.

The "pottery concentration" in Trench B (14 inches in depth) includes 63 sherds, all apparently from the same grog-tempered vessel. The few rims have a single horizontal incised line also immediately under the vessel lip; the remainder of the sherds are plain.

North Mound, Area I (accession no. 03-08-816)

Jones' work in the North Mound led to the recovery of 72 plain sherds and 14 decorated body sherds, all from utility wares. The plain wares include a single plain rim, 67 plain body sherds (among them a sherd from a carinated bowl), and four thick grog-tempered body and base sherds that may be from a grog-tempered Williams Plain vessel. Among the utility ware are body sherds with punctated (n=5), incised-punctated (n=2), and incised (n=7) decorative elements.

There are both fingernail (n=2) and tool (n=2) punctated sherds from the North Mound. The punctations occur either in rows (n=3) or are randomly placed (n=2) across the vessel sherd surface.

The first incised-punctated body sherd has at least three widely-spaced parallel (likely oriented horizontally around the vessel rim) incised lines with a single row of triangular-shaped tool punctations between the lines; similar sherds are present in the Hudnall locality (see above). The second incised-punctated body sherd is from a Crockett Curvilinear Incised vessel; it has an incised circle filled with tool punctates.

Four of the seven incised sherds from the North Mound have only a single straight incised line. Two others have closely-spaced parallel incised lines, and

the last incised sherd is from a carinated bowl that has closely-spaced vertical incised lines on the rim panel. This particular sherd may be from a Dunkin Incised vessel (cf. Suhm and Jelks 1962:Plate 19d, h).

Cherokee Bayou Mound site, Easton (accession no. 03-08-817)

The materials in this accession collection include 27 plain body sherds and 13 decorated sherds, all from utility wares. Four of the sherds (one rim and three body sherds) may be from a Pennington Punctated-Incised beaker (cf. Suhm and Jelks 1962:Plate 61c) with vertical incised panels and vertical zones filled with tool punctations. There are two rims from different Davis Incised vessels that have horizontal incised lines; a third rim has a single deeply horizontal incised line midway down the rim, and there is a body sherd with multiple and closely-spaced incised lines on it.

Three sherds have punctated decorative elements. The first of these has two rows of tool punctations placed midway down the rim, while the second rim has at least three rows of triangular-shaped tool punctations. One body sherd has random or freely placed linear punctations covering the sherd surface. One grog and bone-tempered body sherd from this collection has a series of vertical rows of pinching, and a rim has a row of small circular punctations just below the vessel lip and above a single horizontal incised line.

Easton (accession nos. 03-08-812, 03-08-813)

The sherds in this part of the collection were collected on January 18, 1958, and include sherds from a 1W trench. They include 46 plain body sherds, one plain body sherd from a bottle, 10 base sherds, and a number of decorated sherds from fine ware and utility ware vessels.

Sherds from utility ware vessels include four Weches Fingernail Impressed, var. Weches body sherds (Stokes and Woodring 1981:184-185 and Figures 22n-q and 23a), one Coles Creek Incised rim with multiple horizontal incised lines, a Crockett Curvilinear Incised body sherd with semi-circular incised zones filled with small punctations, and a rim sherd with a horizontal incised panel filled with two rows of stab and drag punctations. Five body sherds have closely-spaced parallel incised lines, and there are 14 other body sherds with punctated elements. Nine of these have one or two rows of fingernail (n=4) or tool (n=4) punctations, one has opposed rows of tool punctations, and five have large circular tool punctations that apparently covered the vessel body.

The fine wares from this work comprise three rims with a single horizontal engraved line below the lip, another rim (from a peaked rim vessel) with at least two curvilinear engraved lines, and one Holly Fine Engraved carinated bowl sherd with closely-spaced vertical engraved lines on the rim panel adjacent to an excised area (cf. Suhm and Jelks 1962:Plate 40a). Three other body sherds have widely-spaced parallel engraved lines and another has a set of opposed engraved lines.

SUMMARY AND CONCLUSIONS

The presence of Holly Fine Engraved, Crockett Curvilinear Incised, Pennington Punctated-Incised, Davis Incised, and Coles Creek Incised sherds from these Buddy Jones collections, from several different contexts, at the Hudnall-Pirtle site indicate that the archaeological deposits he excavated into date to the Early Caddo period (ca. A.D. 900-1200). In general stylistic character, they are consistent with the kinds of decorated sherds found in the larger sherd assemblage discussed by Bruseth and Perttula (2006:82-95) from village and mound contexts at the site, and provide supplementary information about the nature of Early Caddo ceramics at this site in particular, and in this region in general.

A more detailed comparison of decorative methods (Table 1) tells much the same story, in that

Table 1. Comparisons of the decorated sherds from two collections from the Hudnall-Pirtle site.

Decorative Method	THC work	BCJ work
Incised	31.3%	30.0%
Punctated	36.6%	30.0%
Pinched	_	1.0%
Incised-punctated	10.3%	23.0%
Brushed-punctated	_	1.0%
Engraved	21.9%	14.0%
Slipped	_	1.0%
Totals	681	100
Plain/Decorated Ratio	4.00	2.84

incised, punctated, and incised-punctated utility wares dominate the ceramic assemblages in both collections, accounting for between 78.1-84% of the decorated sherds. Fine wares comprise between 15-21.9% of the decorated sherds.

The generally high plain/decorated sherd ratios (see Table 1) are consistent with pre-A.D. 1200 Caddo ceramic assemblages in East Texas. Moreover, they indicate that plain vessels, or vessels where the decorative element is restricted primarily to the rim rather than to both the rim and the vessel body, are important parts of the Early Caddo Hudnall-Pirtle site ceramic assemblage.

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REFERENCES CITED

Brown, I. W.

1998 Decorated Pottery of the Lower Mississippi Valley: A Sorting Manual. Mississippi Archaeological Association and Mississippi Department of Archives and History, Jackson. Bruseth, J. E. and T. K. Perttula, with contributions by G. J. Fritz and B. C. Yates

2006 Archeological Investigations at the Hudnall-Pirtle Site (41RK4): An Early Caddo Mound Center in Northeast Texas. Caddo Archeology Journal 15:57-158.

Phillips, P.

1970 Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955. Papers of the Peabody Museum of Archaeology and Ethnology, Volume 60. Peabody Museum, Harvard University, Cambridge.

Stokes, J. and J. L. Woodring

1981 Native-Made Artifacts of Clay. In Archeological Investigations at the George C. Davis Site, Cherokee County, Texas: Summers of 1979 and 1980, edited by D. A. Story, pp. 135-238. Occasional Papers No.
1. Texas Archeological Research Laboratory, The University of Texas at Austin.

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

1962 Handbook of Texas Archeology: Type Descriptions. Special Publication No. 1, Texas Archeological Society, and Bulletin No. 4, Texas Memorial Museum, Austin

A 19th Century Caddo Component at the Gatlin Site (41RK1) in the Angelina River Basin of East Texas

Timothy K. Perttula

The Gatlin site (41RK1) is located ca. 1 mile to the southeast of the small community of Mount Enterprise in Rusk County in the headwaters of the Angelina River basin in the East Texas Pineywoods (Diggs et al. 2006:Figure 41). The site was first investigated by the landowner in about 1895 (Records on file at the Texas Archeological Research Laboratory [TARL], The University of Texas at Austin). At that time, the landowner exposed a single burial with preserved skeletal remains and two extra skulls in the burial pit; each of the skulls supposedly had a hole (bullet hole?) on one side of the head. Among the funerary offerings reported to have been found by the landowner were arrow points, pottery vessels, a pistol, and a rifle barrel. These findings suggest that the burial dates to historic times and, because of the inclusion of the pottery vessels and arrow points, the find was probably the burial of a Caddo Indian.

In September 1935, A. T. Jackson of The University of Texas at Austin returned to the site area to attempt to locate a Caddo cemetery and recover whole vessels for the university collections (Guy 1990: Table 3; Story and Creel 1982: Table 3). His excavations were unsuccessful in locating any burials, but he did identify a habitation/midden deposit at the site about 50 m west of a mineral spring, on a hillside (TARL files). These deposits were ca. 20 cm in thickness and consisted of broken animal bones. mussel shell fragments, pieces of lithic debris, aboriginal and European-made pottery vessel sherds, a few small pieces of bottle glass, and a fragment of a brass kettle. These finds also suggest that the habitation/midden deposit dates to historic times, although when during the historic period was uncertain because the collections have not been studied in any detail since they were recovered in 1935.

COLLECTIONS FROM THE SITE

In the course of working in 2008 on the analysis of Caddo ceramic assemblages in the TARL

collections from the Neches and Angelina River basins, I had the opportunity to examine and analyze the small collection of artifacts recovered by A. T. Jackson from the Gatlin site midden. This collection includes a small amount of aboriginal pottery, European vessel sherds, bottle glass, and a brass kettle fragment that were found together in a habitation/midden deposit.

Caddo Pottery

Including one sandy paste Goose Creek Plain, *var. unspecified* body sherd (cf. Story 1990:277)¹, there are seven aboriginal pottery sherds in the Gatlin site collection. Six of the sherds are from at least four different Caddo pottery vessels, based on differences in temper, paste, and firing conditions.

One bone-tempered jar (represented by a rim and body sherd) is horizontally brushed on the rim and has vertical brushing on the body with a row of circular punctates pushed through the brushing. The rim is 7.1 mm in thickness, with a rounded and exterior folded lip; the body sherd is 8.5 mm thick. The jar was fired and cooled in a low oxygen environment. The second jar is represented by a bone-hematite-tempered body sherd from an incompletely oxidized vessel with parallel brushing marks.

The third vessel fragment from the Gatlin site includes two plain body sherds with bone-grog temper and a sandy paste; the vessel was fired in a low oxygen or reducing environment. These body sherds range from 5.0-7.9 mm in thickness. The last vessel is represented by a single plain bone-tempered body sherd (6.0 mm in thickness); it came from a vessel fired in an oxidizing environment.

In sum, all four vessels are bone-tempered, and those that have decorations have been brushed and brushed-punctated. The Caddo ceramic technology and decorative styles documented at the Gatlin site suggests that the closest affiliations of the Caddo group that lived there and made and used the pottery

are with other Caddo sites and communities in the Angelina river basin (Perttula 2008:Figure 12-3). This same broad area of East Texas was occupied in historic times by numerous Caddo groups that were affiliated with the Hasinai Caddo (cf. Swanton 1942), including the Nasoni, Nadaco, Hainai, and Nacogdoche. The prehistoric Caddo settlers at the Gatlin site shared a common ceramic heritage with other prehistoric and historic Caddo groups living in this part of East Texas. The site lies near the center of this East Texas ceramic tradition. In areas where archaeological investigations have been undertaken in this East Texas area, brushed pottery is an important decorative component in the utility wares after ca. A.D. 1250, and the proportion of brushed pottery appears to increase through time, on into the historic era. Caddo sites in these areas also have high proportions of burned bone used as temper.

European Pottery

The European pottery sherds (n=46) from the Gatlin site appears to be from late 18th-early 19th century refined earthenware vessels made in England. In addition to five unidentifiable refined earthenware sherds that have been burned (including four plain body sherds and one sherd with a blue hand-painted line), there are 16 sherds of pearlware (ca. 1780 to ca. 1830) and 25 whiteware (ca. post-1830) sherds in the collection.

The pearlware sherds include two undecorated body sherds and a plain base from a plate as well as a body sherd of mocha ware (cf. Rickard 1993), three blue floral hand-painted rim and body sherds (including an embossed rim) (Figure 1e, g, i), three light to dark blue transfer-printed body sherds (Figure 1b, f, h), and five blue or green shell-edged rim and body sherds. The one green pearlware shell-edged sherd has an even scalloped rim with impressed straight lines and an impressed bud motif (Figure 2c). Miller and Hunter (1990) and Hunter and Miller (1994) indicate that this shell-edged motif was in use from 1800-1840. The three blue shell-edged rims (Figure 2a-b) also have an even scallop and impressed straight lines (1805-1830).

Among the whiteware sherds from the Gatlin site, there are four plain body, two plain rim, and one plain base sherd, and the remainder are decorated pieces. These include blue shell-edged (n=1), blue floral hand-painted rims (n=2) (see Figure 1a), blue-red-green hand-painted body sherds (n=4), and 11 transfer-printed sherds. These sherds are from

plates with purple (n=1, body sherd), red (n=4, body sherds) (see Figure 1c-d), light blue (n=4, two rims and two body sherds), and blue (n=2, both rims) prints, the latter including a continuous repeating floral motif (1820-1836, see Samford 2000) with a scalloped and embossed rim (see Figure 2d-e). Samford's (2000:Table 5) information on the date ranges for the production of printed wares, particularly the mean beginning and end dates of production, suggests that the transfer-printed sherds from the Gatlin site date from ca. 1820-1840.

Bottle Glass

The one bottle glass sherd from the Gatlin site is an olive green sherd from an English wine bottle.

Brass Kettle

There is a single piece of a 3-legged brass kettle in the TARL collections from the site. The piece is a rim fragment with a single visible rivet.

CONCLUSIONS

The archaeological materials recovered by A. T. Jackson from the Gatlin site in 1935 suggest that they are the product of a ca. 1800-1830s Caddo occupation. The estimated age of the site is based primarily on the kinds of European pottery found there, but the Caddo pottery sherds identified at the Gatlin site are consistent in character with the sorts of pottery found on Historic Caddo sites in the southern part of Rusk County and much of Nacogdoches County in the Angelina River basin. The evidence from the Gatlin site suggests that the Caddo continued to make and use traditional forms and styles of pottery in the early 19th century, even as they began to adopt and regularly use massproduced European commodities that they obtained from Anglo-American traders.

Nineteenth century Caddo archaeological sites are very rare in East Texas, and only a small handful are known, among them Timber Hill (Parsons et al. 2002) and 41HS840, a ca. 1830s Caddo village. This dearth of Caddo sites of 19th century age is presumably the result of several factors, including that (1) Caddo populations were small—around 1000 individuals in East Texas in the late 1820s (see Ewers 1969)—and were continuing to decrease in size because of the effects of introduced European

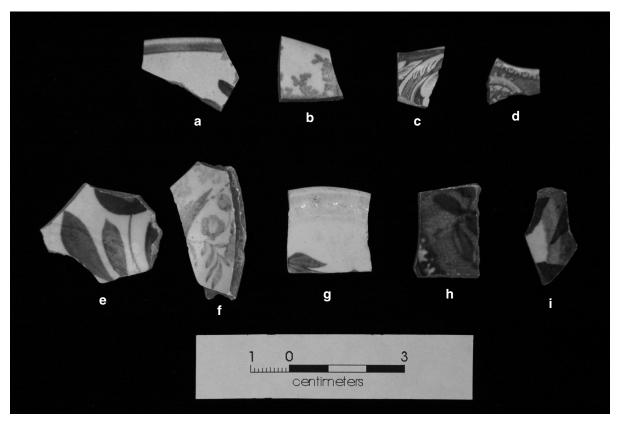


Figure 1. Decorated refined earthenwares at the Gatlin site: a, e, g, i, hand-painted; b, f, h, blue transfer-printed; c-d, red transfer-printed.

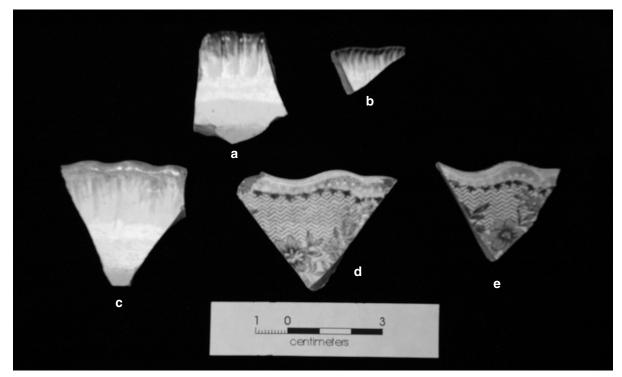


Figure 2. Shell-edged and transfer-printed refined earthenwares at the Gatlin site: a-b, blue shell-edged; c, green shelledged; d-e, blue transfer-printed.

diseases, and (2) the increased mobility of Caddo groups who were attempting to live in an area that was gradually being overrun and settled by Anglo-Americans from the United States that were moving into what was the Mexican province of Texas. Caddo groups did not have the luxury to remain long in permanent settlements, especially after 1835, because of the land-grabbing tendencies of these new settlers, and the shorter the span of occupation at each settlement, the less archaeological materials would be left behind that archaeologists could even locate, were they looking for early 19th century Caddo settlements.

Who were these Caddo that lived at the Gatlin site in such tumultuous times? The meager archaeological evidence only suggests that they were an Hasinai Caddo group. However, the Gatlin site is not far from the location of 18th century Nasoni Caddo settlements on the upper Angelina River.

END NOTE

1. The Goose Creek Plain sherd is indicative of a pre-A.D. 800 Woodland period Mossy Grove culture occupation at the Gatlin site (Story 1990:277-278).

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REFERENCES CITED

Diggs, G. M., Jr., B. L. Lipscomb, M. D. Reed, and R. J. O'Kennon

2006 Illustrated Flora of East Texas, Volume One: Introduction, Pteridophytes, Gymnosperms, and Monocotyledons. Botanical Research Institute of Texas, Fort Worth.

Ewers, J. C. (editor)

1969 The Indians of Texas in 1830 by Jean Louis Berlandier. Smithsonian Institution Press, Washington, D.C.

Guy, J. A.

1990 Previous Archeological Investigations. In *The Archeology and Bioarcheology of the Gulf Coastal Plain*, by D. A. Story, J. A. Guy, B. A. Burnett, M. D. Freeman, J. C. Rose, D. G. Steele, B. W. Olive,

and K. J. Reinhard, pp. 27-130. Research Series No. 38. Arkansas Archeological Survey, Fayetteville.

Hunter, R. R., Jr. and G. L. Miller

1994 English shell-edged earthenware. *Antiques* CXLV (no. 3):432-443.

Miller, G. L. and R. R. Hunter, Jr.

1990 English Shell Edged Earthenware: Alias Leeds Ware, Alias Feather Edge. 35th Annual Wedgwood International Seminar, pp. 107-136.

Parsons, M. L., J. E. Bruseth, J. Bagur, S. E. Goldborer, and C. McCrocklin

2002 Finding Sha'chahdinnih (Timber Hill): The Last Village of the Kadohadacho in the Caddo Homeland. Archeological Reports Series No. 3. Texas Historical Commission, Austin.

Perttula, T. K. (editor)

2008 Lake Naconiche Archeology, Nacogdoches County, Texas: Results of the Data Recovery Excavations at Five Prehistoric Archeological Sites. 2 Vols. Report of Investigations No. 60. Archeological & Environmental Consultants, LLC, Austin.

Rickard, J.

1993 Mocha ware: Slip-decorated refined earthenware. *Antiques* CXLIV (no. 2):182-189.

Samford, P. M.

2000 Response to a Market: Dating English Underglaze Transfer-Printed Wares. In Approaches to Material Culture Research for Historical Archaeologists, compiled by D. R. Brauner, pp. 56-85. 2nd Edition. The Society for Historical Archaeology, California, Pennsylvania.

Story, D. A.

Cultural History of the Native Americans. In *The Archeology and Bioarcheology of the Gulf Coastal Plain*, by D. A. Story, J. A. Guy, B. A. Burnett, M. D. Freeman, J. C. Rose, D. G. Steele, B. W. Olive, and K. J. Reinhard, pp. 163-366. Research Series No. 38. Arkansas Archeological Survey, Fayetteville.

Story, D. A. and D. G. Creel

1982 The Cultural Setting. In *The Deshazo Site, Nacogdoches County, Texas, Volume 1: The Site, Its Setting, Investigation, Cultural Features, Artifacts of Non-Native Manufacture, and Subsistence Remains,* edited by D. A. Story, pp. 20-34. Texas Antiquities Permit Series, No. 7. Texas Antiquities Committee, Austin.

Swanton, J. R.

1942 Source Material on the History and Ethnology of the Caddo Indians. Bulletin 132. Smithsonian Institution, Bureau of American Ethnology, Washington, D.C.

East Texas Caddo Research Group, Part One, Caddo Origins

Issues Regarding the Early Development of Caddo Culture Discussion Topics for the East Texas Caddo Research Group, December 2008

Jeffrey S. Girard

BASIC DEFINITIONAL PROBLEMS

Is there a consensus regarding which archaeological traits are diagnostic of Caddo culture?
 What are the necessary and sufficient traits for designating a context as "Caddo" as opposed to, for example, "pre-Caddo" or "Coles Creek?"

CHRONOLOGY

- 1. When did diagnostic Caddo traits first appear in the archaeological record?
- 2. Were these traits linked or did they appear independently?
- 3. Were there temporal differences in the initial appearance of Caddo traits between upland environments and major floodplains?
- 4. What contemporary phenomena were ongoing in the Lower Mississippi Valley and elsewhere in the Southeast?

SOCIAL, POLITICAL, AND ECONOMIC INTEGRATION

- 1. Was there a "center" of Caddo development with subsequent diffusion to surrounding areas, or did Caddo traits emerge in multiple localities roughly contemporaneously as a result of social interactions?
- 2. How many early Caddo ceremonial centers (multiple mounds surrounding plazas) existed and where were they located?

- 3. How important was feasting or other ceremonial activities for integrating formerly diverse communities?
- 4. Did ceremonial centers develop at aggregated villages, or were they constructed as central places within existing dispersed communities?
- 5. Is there evidence for integration of multiple communities into larger "polities" or "chiefdoms?"
- 6. Were Caddo origins linked to changes in subsistence economies, particularly maize agriculture?

SOCIAL AND POLITICAL HIERARCHIES

- 1. Were early Caddo social hierarchies kinship based, or did leaders emerge as individuals, perhaps on the basis of warfare or economic achievements?
- 2. Did some early Caddo *communities* wield power and authority over others? Is there evidence of warfare and conflict between early Caddo communities?
- 3. Did the presence of social hierarchies elsewhere in the Southeast affect early Caddo developments?
- 4. How important was trade in exotic status goods for initiating and maintaining status differences in Early Caddo communities? Did the early Caddos participate in the Southeastern Ceremonial Complex?

THEORETICAL PERSPECTIVES

- Can the archaeological problem of Caddo origins be regarded as an example of the concept of "ethnogenesis" as developed in anthropological studies? Did a Caddo "ethnicity" exist prior to the time that we designate as Caddo in the archaeological record? Is "ethnicity" even a viable scientific concept useful for archaeological studies?
- 2. Should Caddo origins be considered a regional problem, or a problem only approachable as part of more widespread early Mississippian (or even broader) cultural developments?
- 3. To what degree are Caddo origins explainable in terms of "techno-environmental" issues? How important was the development of a distinct Caddo "ideology" and can we identify such in the archaeological record?

Towards the Concerted Study of Caddo Origins

Timothy K. Perttula

The study of the origins of any people from an archaeological perspective is a considerable undertaking, one that may task the efforts and thoughts of a multitude of people, probably from several disciplines. After the talking and discussion in the 2008 East Texas Caddo Research Group (ETCRG) meeting about Caddo origins, how do we proceed from here on out to arrive at a more comprehensive understanding of Caddo origins? For the purposes of discussion, I am assuming that the ETCRG participants agree that the concerted study of Caddo origins is an issue and research problem worth undertaking.

I recently had occasion to read "Zuni Origins: Toward a New Synthesis of Southwestern Archaeology" (edited by David A. Gregory and David R. Wilcox, 2007, University of Arizona Press)¹ to see if their consideration of origins may have some relevant and programmatic suggestions to offer that could serve Caddo archaeologists and ETCRG participants well in our future studies. I think they offer some suggestions and an approach well-worth further consideration for future ETCRG meetings as well as for other meetings and avenues of study concerning Caddo archaeology.

- In any consideration of Caddo origins, there will be a need to think macro-regionally, at multiple spatial and temporal scales. Synthesis needs to be accomplished at many scales, and is a continuing goal;
- Large-scale contexts for considerations of language (i.e., changes in the linguistic landscape), culture, and environments are important, as well as considerations of what constitutes cultural identity in the case of the Caddo(s);

- construct expectations about where to look for antecedents of the Caddo; where does the Caddo tradition fit in the development of Mississippian/Southeastern societies; what are the relationships between the Caddo and neighboring groups;
- 3a. paralleling the compilation of the Coalescent Communities Database (Wilcox et al. 2007:165-209), develop methods to arrive at a more realistic demographic estimate of population trends and the relative distribution and abundance of Caddo populations on the landscape through time, and their changes through time; what would serve as a proxy for demography in the Caddo archaeological record?
- determine how distinctions based on material culture can be employed in modern archaeological contexts to be organizationally and archaeologically meaningful;
- 5. Conceptualize the origins issue in terms of a research design of related general problem domains and specific research questions. Jeff's handout has made a very good start in that direction.

How might we then proceed? The *Zuni Origins* book advocates a research approach that should work well, and can be developed out of the ETCRG framework, and that is:

 bring a diverse set of folks together that are conducting or are wanting to conduct, relevant Caddo research, or have information they can contribute to the larger issues, to consider the specific research questions and problem domains mentioned above.

^{1.} Something to consider: There has been a suggestion made by several linguists that there is an ancient linguistic relationship between Caddoan and Keresan, a Southwestern language group in western New Mexico, and Zuni, more closely related to Keresan. Hill (2007:21, fn 2) suggests that the relationship is a remote one, probably that of populations and languages that split more than 7000-8000 years ago.

- Such a group could meet in an advanced seminar setting, or some other setting where a small and focused group of folks can meet, as the mechanism to achieve new syntheses of those particular Caddo research problems and issues. Such a setting is one where research findings are presented and discussed.
- Such a framework could proceed along the following lines: (a) key individuals or a team of Caddo archaeologists develop problem domains and research questions (i.e., a research design) that are relevant to a consideration of an issue such as Caddo origins and put the issue in its broadest context; (b) bring together people as presenters and discussants who can provide scale and diversity in research perspectives to suitably address the problem domains and research questions; (c) ask these people to prepare written papers prior to the advanced
- seminar meeting, or serve as discussants, on some aspect of the research design, then present synopses and conduct discussions at the meeting itself on problem domains and research questions—the seminar serving as a sounding board for findings, hypotheses, and conclusions; and (d) after the advanced seminar meeting, these same individuals (and perhaps others that can be enlisted) prepare final versions of papers that have taken into account the various perspectives aired at the seminar itself. Publications outlets are sought, or working documents prepared for future use.
- From there, meetings to further develop or pursue related research issues, or examine in more depth a particular research problem concerning Caddo origins, could be held at a Caddo Conference, a future ETCRG meeting, or some other venue.

Comments on Caddo Origins in Northwest Louisiana

Jeffrey S. Girard

INTRODUCTION

This paper presents some of my thoughts on the issue of Caddo origins from the perspective of the Red River drainage in northwest Louisiana. These ideas were assembled prior to the Caddo discussion group meeting held in December 2008 and have been only slightly modified here. The paper was not given as a formal presentation, but I attempted to introduce the main points during the group discussion.

Development of better chronological controls is crucial for addressing problems of Caddo origins, and I discuss this issue first. Although much has been settled since the early Krieger-Ford discussions, a finer-grained chronology is necessary to answer questions that are now of interest. We remain largely dependent on our understanding of changes in ceramic assemblages and how we can tie these to chronometric scales based primarily on radiocarbon dating.

I next review the cultural taxonomic units that have been used to classify the pre-Caddo archaeological record in the Trans-Mississippi South. Rather than taking the view that one or more of these cultural entities transformed into Caddo culture, I suggest that Caddo origins might be better viewed as the development of social and economic behaviors that linked relatively small-scale social units previously only loosely and sporadically associated. I then discuss the possible importance of the development of ceremonial centers, the appearance of elite mortuary traits, and the circulation of finely engraved ceramic vessels for understanding changes in social and economic integration that took place in the Trans-Mississippi South between approximately A.D. 900 and A.D. 1050. Finally, I offer a list of some basic questions that I feel are important for furthering our understanding of Caddo origins.

CHRONOLOGICAL ISSUES

Early research on the issue of Caddo origins focused on establishing temporal priority to certain

culture traits in order to determine their place of origin and direction of diffusion. Alex Krieger, based on his analysis of the George C. Davis site, initially suggested that the Caddo tradition first developed at a time level contemporary with the Middle Woodland period Marksville and Hopewell cultures (Newell and Krieger 1949: 219-224). It followed from this idea that Mississippian traits may have diffused from Mexico, through the Caddo area, and into the Mississippi valley. James Ford's views were different. To Ford, the Caddo area represented a late diffusion of Mississippian traits to the west. He disagreed with Krieger's chronology by arguing that: (1) the Davis site actually shows relatively little ceramic variation and is not likely to represent a long occupation; and (2) Caddo ceramic traits do not occur in the lower Red River region until after the Coles Creek period (Ford 1951:127). In his summary in the Belcher site report, Clarence Webb (1959:207) shortened Krieger's chronology but argued for more time depth than suggested by Ford:

> Looking at the entire picture of the lower Mississippi Valley sequence and the Caddoan sequence, it seems reasonable to think that Caddoan beginnings in Alto, Spiro, and Gahagan were approximately coincidental with the introduction in the lower valley of temple mounds, small projectiles and French Fork-Coles Creek Incised-Mazique Incised and Rhinehart Punctated pottery types, whether one calls this Troyville or Coles Creek. Coles Creek was apparently contemporaneous with Gibson aspect, Plaquemine with Bossier and Belcher foci, and Natchez with late Belcher, Mid-Ouachita and Glendora foci. These alignments may be shifted slightly one way or the other at some particular point, but this sequence seems to best fit traits held in common, various suggested movements or influences, and actual trade objects.

By the early 1960s, there seems to have been a general consensus that Caddo beginnings were contemporary with the Coles Creek culture in the Lower Mississippi Valley. Radiocarbon dates were sparse, however, and the timing and nature of Coles Creek—Caddo relationships were poorly understood. Phillips' (1970) synthesis clarified some issues, but problems with dating the Baytown and Early Coles Creek periods resulted in continued difficulties for understanding how the earliest Caddo occupations correlated with the Lower Mississippi Valley sequence.

There appears to have been a gradual increase in distinctive Caddo ceramics during the 10th and early 11th centuries A.D. along the Red River in northwest Louisiana and southwest Arkansas. The ceramic characteristics considered "Caddo" that came into use during this time are:

- decorative bands consisting of multiple, close-spaced horizontal lines, on deep bowls and jars—similar to the later *Hardy* variety of Coles Creek Incised in the Lower Mississippi Valley; many vessels apparently had unzoned punctations on vessel bodies (Kiam Incised) marking the beginning of the Caddo tradition of treating vessel rims and bodies as distinct design fields (cf. Schambach 1982).
- 2. carinated bowls with zoned punctated decorations. Contemporary zoned punctated vessels were made in the Lower Mississippi Valley (Avoyelles Punctated), but rarely on carinated bowls.
- polished vessels with engraved designs, most of which were serving vessels (bowls, carinated bowls, bottles) and may have had special significance beyond their utilitarian functions (see below).

Although these traits differentiate Caddo assemblages from those in the Lower Mississippi Valley and mark the beginnings of a Caddo ceramic tradition, sites dating to the middle 11th century also include, and often are dominated by, vessels similar to Middle Coles Creek phases in the Lower Mississippi Valley, especially the *Coles Creek, Greenhouse*, and *Blakely* varieties of Coles Creek Incised; with lesser amounts of French Fork Incised, Beldeau Incised, and Hollyknowe Pinched/Ridged. These Coles Creek ceramics pertain primarily to the Pritchards Landing phase in the lower Ouachita River valley

(Kidder 1990), the Greenhouse phase of the lower Red River (Belmont 1967), and the Balmoral phase in the Tensas River basin (Kidder 1992), all of which date approximately to the A.D. 900 to A.D. 1050 interval (Kidder 1990, 1992; Weinstein et al. 2003). As noted by Schambach (1982), however, ceramic fabrics in the Trans-Mississippi South tend to differ from Coles Creek contexts to the east and there often are subtle design variations.

There is some evidence, however, that distinctively Caddo ceramics date earlier than A.D. 900. The James Pace site (16DS268) in the middle Sabine River drainage, like Mound 3 at Mounds Plantation, has many Coles Creek Incised var. Hardy sherds, as well as a few engraved specimens (Jensen 1968; Story 1990:317-319; Girard 1994). Pace also contains a significant number of sherds with one or two incised lines that appear to relate to Early Coles Creek varieties. Only two radiocarbon dates have been obtained from the site, and these suggest that occupation may have begun there as early as A.D. 700, and then lasted until shortly after A.D. 1000 (Girard 1994). Insufficient work has been done at the Pace site to isolate early and late contexts. No Early Coles Creek types were identified in or beneath Mound 3 at Mounds Plantation, suggesting that occupation of that portion of the site began after A.D. 900. However, Early Coles Creek sherds have been recovered in surface collections and initial occupation of the site likely dates at least as early as the 9th century. However, it is not clear whether or not Caddo types also were in use at that time. Early varieties of Coles Creek Incised were recovered from the deep midden at the Festervan site (16BO327) in Bossier Parish where a radiocarbon date that calibrates in the A.D. 686-878 range was obtained, fitting well with the Lower Mississippi Valley chronology (Girard 1995). No distinctly Caddo materials were present in the lower levels of the midden. Festervan has a Late Caddo period component as well, however, and a few later sherds were mixed in the upper portion of the midden. Thus, current data from northwest Louisiana indicate that, in the A.D. 900 to 1050 interval, early Caddo pottery was mixed in assemblages that also contained substantial amounts of Middle Coles Creek types. The full range of Early Caddo period ceramics was in use by the late 11th century.

From the Crenshaw site in southwest Arkansas, Schambach (1982:152) reported one radiocarbon age from a Crenshaw phase (Late Fourche Maline) context and five from Lost Prairie phase (Early Caddo period) contexts. Estimating the C12/C13 correction on these ages and calibrating the results indicate that the Crenshaw phase dates prior to A.D. 1050 and the Lost Prairie phase dates in the A.D. 1050 to 1250 range. As at Mounds Plantation, the presence of Early Coles Creek ceramics at Crenshaw suggests that the earliest occupations might be in the A.D. 700 to A.D. 900 range. Troyville types have not been identified, however, perhaps indicating that little or no significant activity took place at Crenshaw or Mounds Plantation prior to that time. No contexts have been reported where distinctively Caddo ceramics are mixed with these Early Coles Creek types.

In eastern Texas, however, radiocarbon dates from the George C. Davis site suggest that Caddo ceramics began to appear by the 9th century A.D. (Story and Valastro 1977; Story 1981, 1990). Story (2000:Figure 3) places the earliest Caddo occupations at the George C. Davis site in the middle 9th century, but the largest number of radiocarbon dates from the village area fall in the A.D. 950 to A.D. 1200 range (Story 1997:96). Perttula (2008) recently reported Caddo-like decorations on Mossy Grove sandy paste ceramics in the Lake Naconiche area (Attoyac Bayou drainage) in eastern Texas. Contexts from the Boyette site (41NA285) appear to date as early as the 7th and 8th centuries A.D.

CULTURAL CONTEXTS

Although ceramics with decorations similar to Middle Coles Creek types in the Lower Mississippi Valley were abundant in the middle Red River drainage between A.D. 900 and 1050, the meaning of this connection is of considerable dispute. The issue is particularly important as it pertains directly to discussions of the beginnings of the Caddo cultural tradition.

The prevailing view in Louisiana has been based on the ideas of Clarence Webb who saw Caddo origins as resulting from expansion of Coles Creek culture from the Lower Mississippi Valley, and contact with Mesoamerican groups. Webb argued that Coles Creek hamlets and villages were scattered in the Red River floodplain and along upland streams. The Coles Creek groups constructed a small number of civic-ceremonial centers including Mounds Plantation, the Gahagan site in Red River Parish, and the Crenshaw site in southwestern Arkansas (Webb and Gregory 1986:3-4). Webb left open the question of whether Caddo culture is a locally transformed Coles Creek manifestation, or whether an influx of new peoples is represented. He seemed to favor the former (Webb and McKinney 1975:120-121) and followed Krieger's early arguments suggesting that Mesoamerican influences are linked to early Caddo developments, particularly certain ceramic traits (carinated bowl and bottle forms, polished/smudged surfaces, engraving/excising, curvilinear motifs) and mortuary practices (multiple burials of elites in deep, shaft graves).

Based on information from southwestern Arkansas, a different point of view has been expressed by Frank Schambach (1982, 2002). Schambach argues that long-term local cultural continuity is represented in the Red River drainage with only minimal influences from the Lower Mississippi Valley. He classifies all pre-Caddo developments in the woodlands west of the Lower Mississippi Valley (the Trans-Mississippi South) within the Fourche Maline culture concept. Fourche Maline sites are identified by the presence of distinctive, thick-walled ceramic jars, usually flowerpot or beaker-shaped. The jars were tempered with grog, grit, and sometimes crushed bone. Most abundant and widespread is the grog-tempered type Williams Plain. Other traits include contracting stem (Gary) dart points, double-bitted axes, boatstones, platform pipes, and abundant ground stone tools (Schambach 2002:91-3). Fourche Maline houses have proven difficult to detect-postholes, wall trenches, and other evidence of structural remains have not been identified. In southwestern Arkansas, floodplain settlement on natural levees in the then active Red River meander belt and along crevasse displays is evident (Kelley and Coxe 1998:204). Small villages, 2-10 acres in size, may be represented (Schambach and Early 1982:72). Similar sites have been recorded in northwest Louisiana, north of the Shreveport area. The Fourche Maline subsistence economy is not well understood. Schambach (2002:103-108) discusses the possibility that cultivation of starch/ oily seed crops took place. Abundant grinding stones and double-bitted axes might reflect gardening and seed processing. However, no plant food remains have been recovered.

Schambach sees Fourche Maline culture as an adaptation to the environments of the Trans-Mississippi South. Unfortunately, possible differences between Woodland period economies of the Trans-Mississippi South and those in the Lower Mississippi Valley have never been explored in more than a cursory manner. Given the differences in the landscape, an overall greater focus on bottomland, riverine resources in the Lower Mississippi Valley (cf. Kidder and Fritz 1993:294), in contrast with a focus on upland resource exploitation in the Trans-Mississippi South, might be expected. Several major traits attributed to Fourche Maline culture by Schambach may be linked to subsistence practices specifically, large thick-walled vessels, black-earth middens, and abundant grinding equipment. It is possible that these traits relate to an emphasis on nut processing, particularly hickory nuts, which are abundant in the oak-hickory-pine vegetation regime within which the sites appear to cluster. It also is possible that the Fourche Maline inhabitants adopted oily/starchy seed crop horticulture and that double-bitted axes are cultivating tools, as suggested by Schambach (2002:104-105).

The Fourche Maline economy may have contrasted with subsistence economies in the Piney Woods region to the south, and with those in the Lower Mississippi Valley where bottomland, riverine resources were of primary subsistence importance at least since the Middle Archaic period (e.g., Jackson and Scott 2001; Gibson 2000; Kidder and Fritz 1993). The Woodland period archaeological record in the segment of the Red River floodplain between the mouth of Loggy Bayou and the Natchitoches area is poorly known. The hills adjoining the floodplain in this region are covered by the Piney Woods where few Woodland period contexts have been identified. Fourche Maline black-earth middens with Williams Plain pottery do not seem to occur here. Although it is possible that the paucity of sites is due to poor sampling, there also may have been no distinct local population that inhabited the area. Rather, sporadic use by groups from the northwest and southeast might be represented.

In the Natchitoches area, two major tributaries on the east side of the Red River floodplain, Black Lake Bayou and Saline Bayou, converge to produce a swampy, lowland environment, major portions of which are now continually inundated by a series of lakes (Black Lake, Clear Lake, Saline Lake, and Chee Chee Bay). In many respects, this area mimics environments in the Lower Mississippi Valley. The area also has been long noted for archaeological similarities to the Lower Mississippi Valley for periods pre-dating about A.D. 1000. Best known are sites of the Fredericks phase (Fredericks and Montrose sites) with ceramics similar to Troyville culture

sites to the east (Girard 2000), and the slightly later Lemoine phase (Black Lake Bayou, Lemoine, Edwards, and MacNeely sites) with ceramics similar to Early Coles Creek sites (Girard 2001). Similar sites are present to the south into the Red River floodplain between the present cities of Natchitoches and Alexandria, where three major channels were active in late prehistoric and historic times.

Schambach argues that Fourche Maline is the single cultural antecedent to Caddo culture. The transition was linked to initial participation of Late Fourche Maline peoples in the developing Mississippian interaction sphere. Strongest connections were to the north, with ornamental trade goods and a distinctive mortuary program resulting from contacts with Cahokia (Schambach 2002:112). In contrast to Webb, Schambach (1982:190) sees little evidence that Coles Creek peoples of the lower Red and Ouachita River drainages influenced developments farther upstream on the Red River at this time.

Like Schambach, Story (1990:323) argued that migration hypotheses for Caddo origins are unsupported by archaeological evidence. However, like Webb, she suggested that influences from the Lower Mississippi Valley are likely to have played an important role. Story argued that several different cultural traditions, probably with roots deep in the Woodland period, are direct ancestors to the Caddos. One of these, the Mossy Grove culture, is distinguished by distinctive sandy paste ceramics, and existed in the Neches and Angelina River drainages in East Texas. Perttula and Nelson (2004) proposed that a culture designated Mill Creek was situated in the upper Sabine River drainage, portions of the Big Cypress Creek drainage, and upper Angelina River basin, between the Mossy Grove and Fourche Maline peoples.

Differences in interpretations regarding Caddo cultural antecedents relate, in part, to the lack of distinct ceramic stylistic criteria on which to formulate taxonomies. It is possible that, prior to about A.D. 900, the fluid nature of social and territorial boundaries minimized group stylistic behavior. Local ceramic types are defined on the basis of general technological traits, not on the basis of decorative styles which, when present in the Trans-Mississippi South, mimic those in the Lower Mississippi Valley. Archaeological "phases" with distinct spatial boundaries are difficult to define under these circumstances.

SOCIAL AND ECONOMIC **INTEGRATION**

The phenomena that archaeologists have considered to represent the beginnings of Caddo culture in northwest Louisiana clearly relate to broader patterns of social and economic integration that took place in the Trans-Mississippi South after about A.D. 900, and are linked to early "Mississippian" developments in general in the Southeast. Throughout most of the Trans-Mississippi South, Late Woodland social and economic relationships between local groups probably were poorly defined and ephemeral. North of the Fredericks site in the Natchitoches area, no population centers or ceremonial areas are known that would suggest the existence of an over-arching political structure or ideology that bound groups together. If archaeological constructs such as Fourche Maline, Mossy Grove, or Mill Creek had cultural reality in the past, they were entities only in the most generic sense. These "cultures" cover vast expanses of the landscape and are defined on the basis of general technological, rather than stylistic, criteria. As noted above, such large-scale, generic cultural constructs might be useful as analytic units for addressing questions concerning variation in widespread ecological adaptations. However, understanding Caddo beginnings might be better viewed as the integration of multiple, relatively autonomous social units, rather than as the transformation, and subsequent diffusion, of existing large-scale "cultural" entities.

Although the archaeological record for the 8th through 10th centuries is poorly known, it does seem clear that by the early 11th century, relatively highly integrated social units had formed and persisted in areas where smaller, more autonomous groups once existed. From a functional perspective, communities linked by close social and economic ties may have had advantages over smaller, isolated communities because these bonds: (1) minimized social barriers for exchange of resources from varying portions of the landscape; (2) facilitated intensification of food production in the form of agriculture, and consequent generation of surpluses and re-distribution in times of need; (3) enabled aggression against less integrated neighbors for resources or labor; and (4) provided protection from other groups undergoing similar changes. As some groups adopted this course, others were compelled to do likewise or be eliminated as separate systems of organization (or at least their residues would not be recognized as distinct entities in the archaeological record).

If integration of multiple communities is represented by the presence of ceremonial centers, in portions of the Lower Mississippi Valley, and to a lesser degree up the Red River as far as the Natchitoches area, this phenomenon had been ongoing during the Late Woodland period, and perhaps earlier. The Fredericks site in Natchitoches Parish is the northernmost example of such a center during the Late Woodland period (Girard 2000). However, most of the Trans-Mississippi South was isolated from these trends until the period between approximately A.D. 900 and A.D. 1050 when the first ceremonial centers (multiple mounds surrounding plazas) appeared in the Red River floodplain. Development of these centers was accompanied by (1) the beginnings of a distinctive mound mortuary program; (2) the first evidence of dispersed floodplain villages; and (3) dramatic changes in ceramic vessel forms and decorations, including the initial presence of fine engraved pottery, a form of decoration that did not exist in the Lower Mississippi Valley or elsewhere in the Southeast at that time. A major research issue for the region is establishing the chronological order that these traits were developed or adopted. With present chronological resolution, all appear roughly simultaneously and, thus, seem to be closely linked.

THE ESTABLISHMENT AND DEVELOPMENT OF CEREMONIAL **CENTERS**

Inter-community integration is visible in the archaeological record by the presence of ceremonial centers. Several recent studies in the Southeast attempt to identify and understand the significance of the ceremonies likely to have been conducted at these centers, stressing the role of feasting in the establishment of regional polities and social hierarchies (e.g., Knight 1986; Blitz 1993; Jackson and Scott 1995; Kelly 1997; Pauketat et al. 2002). In these studies, ethnographic and historic information is used to demonstrate that connections between communities are created when some groups host feasts that cross-cut existing social barriers (such as kinship ties) and institute new links between formerly unaffiliated or even hostile groups. Means of communication and cooperation often are established whereby decisions beneficial to security and prosperity are made on regional, rather than local, scales. Dietler and Herbich (2001:243) note that feasts may involve the mobilization of labor, including land clearing and field preparation. Such "work feasts" enabled hosts to produce food surpluses both to sponsor additional feasts and to re-distribute food in times of need.

Kidder (1998a:132-133) argued that a major difference existed between Coles Creek culture settlements in the Lower Mississippi Valley and Early Caddo settlements along the Red River. Early Coles Creek ceremonial centers consisting of two or three mounds arranged around a central plaza were present by the 9th century. Such sites became increasingly numerous through time, eventually forming a social landscape consisting of multiple small scale "petty chiefdoms" not dominated by any single center (Kidder 1992:154, 1998b:140). In contrast to the Lower Mississippi Valley, Kidder (1998a:133) sees evidence that the Early Caddo landscape consisted of a few paramount centers, roughly evenly spaced across the region, without smaller, secondary centers. Ceremonial centers in both areas were used both for public rituals and as mortuary facilities for elites. Elite burials at the Caddo centers, however, exhibit greater evidence of concentration of wealth and power in the hands of a limited number of individuals, and Kidder (1998a:133) suggests the existence of "a vertically ranked society with territorially distinct authority over large areas."

Unfortunately, few Early Caddo period ceremonial centers in the Red River drainage are actually known. Only the Mounds Plantation site, located north of Shreveport, is documented in northwest Louisiana. The Crenshaw and Bowman sites in Southwest Arkansas also were major Early Caddo ceremonial centers, but none of the Caddo sites are particularly large compared to their Coles Creek contemporaries. Although the dynamic nature of the Red River undoubtedly has destroyed some mounds (Schambach 1982:11), relative to the Lower Mississippi Valley, mound construction appears to have been an infrequent activity along the Red River prior to A.D. 1200. The number of ceremonial centers is so few that it makes little sense to interpret their spacing except to note that they are at considerable distances from one another. It seems more reasonable to view the centers as disconnected attempts at local social integration, rather than as representing the sudden emergence of a hierarchically structured political entity in control of a vast region.

ELITE MORTUARY PATTERNS

Despite having a complex social hierarchy as evidenced by the settlement patterns, late Baytown and early Coles Creek community or regional leaders in the Lower Mississippi Valley were not distinguished through special mortuary treatments. Mass burials on platforms or in shallow pits later covered by earth to form low mounds were present at sites such as Greenhouse (16AV2), Gold Mine (16RI13), Mt. Nebo (16MA18), and Old Creek (16LA77) (Ford 1951; Jones 1979; McGimsey 2004; Giardino 1984; Gibson 1984). The Gold Mine site (16RI13), which has radiocarbon dates in the A.D. 775-875 interval, probably was used by multiple small communities. As is the case with the other burial sites, numerous individuals were buried together with no evidence of status differentiation (McGimsey 2004:214). Individuals do not appear to have been carefully placed and many bones are missing. The lack of highly decorated ceramic vessels or goods of exotic stone, marine shell, or copper in burials continued in the subsequent Coles Creek periods, and this pattern contrasts markedly with the 11th century shaft tombs at Early Caddo period sites such as Crenshaw, Mounds Plantation, Gahagan, and George C. Davis.

Mound 5, the major mortuary facility at the Mounds Plantation site, was constructed in two stages. Seven burial pits were dug prior to the final capping of the primary mound. Grave goods were limited to arrow points. Six burial pits were made during construction of the secondary mound. Holly and Hickory Fine Engraved vessels, along with numerous elaborate burial goods, were placed in four of these pits. Webb saw changes in Mound 5 burial traits as evidence of a transition from the earliest occupation of the site by Coles Creek peoples, to the later Early Caddo occupation. Because the burials made from levels above the primary mound did not intrude on the earlier burials, and multiple individuals laid out in rows were present in both primary and secondary mound burial pits, Webb argued that: "There is evidence in Mounds 3 and 5 of a progressive and rapid shift from Coles Creek to Caddoan (Alto) culture with little evidence of time lag and no indication of desertion and reoccupation" (Webb and McKinney 1975:120). Unfortunately there are no radiocarbon dates from the early Mound 5 burials, and the absence of ceramic vessels precludes comparisons with other areas.

Perhaps the earliest burials at a mound center in the Trans-Mississippi South are present at the Crenshaw site in southwest Arkansas. In Mound C at least four large clusters of human burials were made on top of a low earthen platform that subsequently was buried by mound deposits. As in the Lower Mississippi Valley sites, numerous individuals were placed in mass graves. However, in contrast to the Lower Mississippi Valley pattern, individuals were placed in neat rows and multiple burials goods (Coles Creek Incised ceramic vessels, ceramic pipes, arrow points, bone awls) were included in the graves (Durham and Davis 1975). Although these contexts have not been radiocarbon dated, the Early Coles Creek pottery strongly suggests that the burials date prior to A.D. 1000. The linear mass burials at Crenshaw resemble those in Mound 72 at Cahokia, but may pre-date the Cahokia burials by two centuries or more.

The later burials in Mound C at Crenshaw were sunk deeply into the mound fill that capped the low platform. These graves contain fewer individuals, Early Caddo period ceramic vessels and other grave goods, and likely date to the 11th century or later based on dates from similar burials at Mounds Plantation, Gahagan, and George C. Davis. Better chronological control and more detailed comparisons of mortuary patterns at ceremonial centers between the Fourche Maline-Early Caddo sequence in the Trans-Mississippi South and the Early to Middle Coles Creek sequence in the Lower Mississippi Valley would greatly enhance our understanding of Caddo origins.

FINE WARE CERAMICS

The widespread distribution of engraved ceramics by the Early Caddo period might be a consequence of regional interaction between diverse social groups that were in the process of forming sedentary communities with incipient social hierarchies. The interaction consisted of exchange or emulation of prestige goods displayed in community social contexts, most likely rituals involving feasting. It is possible that highly polished, finely engraved ceramic bowls and bottles were among such prestige items in the Early Caddo period. Two basic forms of decoration are represented—vessels with simple lines around vessel rims (Hickory Engraved), and highly elaborate rectilinear and curvilinear patterns, often with excised zones and pigment rubbed into both lines and zones (Holly Fine Engraved and Spiro Engraved). Vessels tend to have thin vessel walls, fine paste, and designs are exceptionally finely executed. These traits suggest manufacture by a limited number of highly skilled artisans.

In northwest Louisiana during the Early Caddo period, finely engraved sherds appear only in small amounts in village debris. However, they are the exclusive vessel forms placed in the mound burials at both the Mounds Plantation and Gahagan sites. Such vessels may have been displayed in rituals and were sources of community pride, but access and use probably were limited to specific groups within communities. The dominance of serving vessels (bowls, bottles) suggests that they were displayed in ceremonial contexts, probably involving feasts or ritual consumption of food.

Importantly, regardless of where they were manufactured, similar attributes (paste, vessel forms, and general decorative patterns) occur on Early Caddo period engraved vessels throughout the Caddo area as represented by the types Hickory Engraved, Holly Fine Engraved, and Spiro Engraved. Apparently these vessels served as accourrements of wealth, power, and status. They may have been involved in exchanges between emerging elites within the Caddo area, as well as outlying areas, particularly Cahokia and the American Bottom region during the late 11th and early 12th centuries. The engraved pottery seems to signify emerging Caddo culture as distinct from cultures in the Lower Mississippi Valley. Although it is unlikely that the Caddo area was unified in any social or political sense during the Early Caddo period (or anytime thereafter prior to the middle 19th century, see Story 1978), a widespread sense of singular cultural or perhaps even ethnic identity may have begun to materialize.

The context of production for early engraved pottery is not known. If the ceramics were produced at a single location and traded to outlying communities, one possible center for production is the George C. Davis site located along the Neches River in East Texas. Holly Fine Engraved was the most numerous decorated type among the estimated 1101 vessels represented in the materials recovered from the Mound A excavations. No collections from northwest Louisiana even remotely approach the quantities represented at Davis. However, no contexts have been excavated that are comparable to Mound A—an "inner precinct" area (Story 1997) possibly confined to elite habitation and ritual. Polished and engraved pottery has been recovered in the Huastecan area along the Gulf Coast of Mexico (Newell and Krieger 1949:224-232; Webb and Gregory 1986:5), and it is possible that ceramics from this distant region provided the initial inspiration for the Caddo pottery.

Although initially difficult to produce and acquire, by A.D. 1200 in northwest Louisiana engraved pottery appears to have become part of standard household ceramic assemblages. However, the elaborate patterns of Holly Fine Engraved dropped out of use and were replaced by simpler patterns often with hatched or cross-hatched bands or zones (Maddox Banded Engraved, Glassell Engraved, Hempstead Engraved). Engraved pottery with relatively crudely executed, hatched elements began to appear in village contexts during the Early Caddo period (prior to A.D. 1200). These often thick and unpolished vessels likely represent local attempts to emulate the fine wares. General skill levels improved by the Middle Caddo period, and engraved vessels of varying quality apparently were part of every household. Finer examples may have continued to be sources of pride and status. At the Davis site in East Texas, Krieger noted that, through time, execution of design elements on engraved vessels became sloppier and paste appeared to become coarser (Newell and Krieger 1949:83-84). Localization of production of engraved ceramics was a phenomenon that appears to have taken place throughout the Caddo area—a proliferation of types and regional variation is widely recognized after about A.D. 1200.

RESEARCH QUESTIONS

The topic of Caddo origins obviously is very complex and can be approached from a variety of theoretical perspectives requiring emphases on differing aspects of the archaeological record. Some basic questions that I regard as important include:

- 1 Is there a consensus on which archaeological traits are diagnostic of Caddo culture? Do these traits appear gradually through time, or relatively suddenly as a unit?
- 2 Is there a "center" of Caddo development with subsequent diffusion into surrounding areas, or do Caddo traits emerge from multiple areas as a result of social interactions?
- 3 Was the initial development of Caddo culture dependent upon, or was it stimulated by, contemporary developments in the Southeast and Mesoamerica?

- 4 How important are changes in ecological adaptations, particularly subsistence practices, for understanding Caddo origins?
- 5 Does the appearance of ceremonial centers and elite mortuary ceremonialism in the archaeological record reflect the initial appearance of social hierarchies in the Trans-Mississippi South? Did the region become divided into multiple Caddo "chiefdoms" by A.D. 1200?
- 6 Finally, should we regard the problem of Caddo origins as an example of "ethnogenesis" as developed in anthropological studies?

REFERENCES CITED

Belmont, John

1967 The Cultural Sequence at the Greenhouse Site, Louisiana. Southeastern Archaeological Conference Bulletin 6:27-34.

Blitz, John

1993 Big Pots for Big Shots: Feasting and Storage in a Mississippian Community. American Antiquity 58(1):80-96.

Dietler, Michael and Ingrid Herbich

2001 Feasts and Labor Mobilization: Dissecting a Fundamental Economic Practice. In Feasts, Archaeological and Ethnographic Perspectives on Food, Politics, and Power, edited by Michael Dietler and Brian Hayden, pp. 240-264. Smithsonian Institution Press, Washington, D.C.

Durham, James H. and Michael Davis

1975 Report on Burials Found at Crenshaw Mound "C", Miller County, Arkansas. Bulletin of the Oklahoma Anthropological Society 23:1-90.

Ford, James A.

1951 Greenhouse: A Troyville-Coles Creek Period Site in Avoyelles Parish, Louisiana. Anthropological Papers No. 44(1). American Museum of Natural History, New York.

Giardino, Marcus

1984 Temporal Frameworks: Archaeological Components and Burial Styles: The Human Osteology of the Mt. Nebo Site in North Louisiana. *Louisiana Archaeology* 9:99-126.

Gibson, Jon L.

1984 Old Creek, A Troyville Period Ossuary in LaSalle Parish, Louisiana: Reflections After a Quarter Century. *Louisiana Archaeology* 9:127-204.

2000 The Ancient Mounds of Poverty Point, Place of Rings. University Press of Florida, Gainesville.

Girard, Jeffrey S.

- 1994 Investigations at the James Pace Site (16DS268), DeSoto Parish, Louisiana. Caddoan Archeology Newsletter V(1):8-16.
- 1995 Regional Archaeology Program, Management Unit 1: Sixth Annual Report. Report on file at the Louisiana Division of Archaeology, Department of Culture, Recreation, and Tourism, Baton Rouge.
- 2000 Excavations at the Fredericks Site, Natchitoches Parish, Louisiana. Louisiana Archaeology 24:1-106.
- Regional Archaeology Program, Management Unit 1: Twelfth Annual Report. Report on file at the Louisiana Division of Archaeology, Department of Culture, Recreation, and Tourism, Baton Rouge.

Jackson, H. Edwin and Susan L. Scott

- The Faunal Record of the Southeastern Elite: The Implications of Economy, Social Relations, and Ideology. Southeastern Archaeology 14(2):103-119.
- Archaic Faunal Utilization in the Louisiana Bottomlands. Southeastern Archaeology 20(2):187-196.

Jensen, Hal E.

1968 Archaeological Investigations in the Toledo Bend Reservoir: 1966-1967. Archaeology Salvage Project, Southern Methodist University, Dallas.

Jones, Reca

1979 Human Effigy Vessels from Gold Mine Plantation. Louisiana Archaeology 4:117-121.

Kelley David B. and Carey L. Coxe

1998 Cultural Resources Survey of Levee Rehabilitation/ Restoration Areas Along the Red River Between Fulton, Arkansas and the Louisiana State Line: Items 4, 5, and 9. Report prepared for U.S. Army Corps of Engineers, Vicksburg District. Coastal Environments, Inc., Baton Rouge.

Kelly, Lucretia S.

1997 Patterns of Faunal Exploitation at Cahokia. In Cahokia, Domination and Ideology in the Mississippian World, edited by Timothy R. Pauketat and Thomas E. Emerson, pp. 69-88. University of Nebraska Press, Lincoln.

Kidder, Tristram R.

- Ceramic Chronology and Culture History of the Southern Ouachita River Basin: Coles Creek to the Early Historic Period. Midcontinental Journal of Archaeology 15(1):51-81.
- 1992 Coles Creek Period Social Organization and Evolution in Northeast Louisiana. In Lords of the Southeast: Social Inequality and the Native Elites of Southeastern North America, edited by Alex W. Barker and Timothy R. Pauketat, pp.

- 145-162. Archeological Papers of the American Anthropological Association No. 3.
- 1998a Rethinking Caddoan-Lower Mississippi Valley Interaction. In The Native History of the Caddo: Their Place in Southeastern Archeology and Ethnohistory, edited by Timothy K. Perttula and James E. Bruseth, pp. 129-143. Studies in Archeology 30. Texas Archeological Research Laboratory, The University of Texas at Austin.
- 1998b Mississippi Period Mound Groups and Communities in the Lower Mississippi Valley. In Mississippian Towns and Sacred Spaces, edited by R. Barry Lewis and Charles Stout, pp. 123-150. The University of Alabama Press, Tuscaloosa.

Kidder, Tristram R., and Gayle J. Fritz

Subsistence and Social Change in the Lower Missis-1993 sippi Valley: The Reno Brake and Osceola Sites, Louisiana. Journal of Field Archaeology 20:281-297.

Knight, Vernon James, Jr.

1986 The Institutional Organization of Mississippian Religion. American Antiquity 51:675-687.

McGimsey, Chip

2004 The Gold Mine Site (16RI13): An AD 825 Ossuary in Northeast Louisiana. Regional Archaeology Program, Management Unit III, 2003/2004 Annual Report. Report on file at the Louisiana Division of Archaeology, Baton Rouge.

Newell, H. Perry and Alex D. Krieger

1949 The George C. Davis Site, Cherokee County, Texas. Memoirs No. 5. Society for American Archaeology, Menasha, Wisconsin.

Pauketat, Timothy R., Lucretia S. Kelly, Gayle J. Fritz, Neal H. Lopinot, Scott Elias, and Eve Hargrave

2002 The Residues of Feasting and Public Ritual at Early Cahokia. American Antiquity 67(2):257-279.

Perttula, Timothy K. (editor)

2008 Lake Naconiche Archeology, Nacogdoches County, Texas: Results of the Data Recovery Excavations at Five Prehistoric Archeological Sites. 2 Vols. Report of Investigations No. 60. Archeological & Environmental Consultants, LLC, Austin.

Perttula, Timothy K. and Bo Nelson

Woodland and Caddo Archeology at the Broadway or Kanduts'ah Kuhnihdahahdisa' Site (41SM273) on the City of Tyler-Lake Palestine WTP Project, Smith County, Texas. Report of Investigations No. 50. Archeological & Environmental Consultants, LLC, Austin.

Phillips, Philip

1970 Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955. Papers of the Peabody Museum, Harvard University, Vol. 60. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge.

Schambach, Frank F.

- 1982 An Outline of Fourche Maline Culture in Southwest Arkansas. In *Arkansas Archeology in Review*, edited by Neal L. Trubowitz and Marvin D. Jeter, pp. 132-197. Research Series No. 15. Arkansas Archeological Survey, Fayetteville.
- 2002 Fourche Maline: A Woodland Period Culture of the Trans-Mississippi South. In *The Woodland South-east*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 91-112. The University of Alabama Press, Tuscaloosa.

Schambach, Frank F. and Ann M. Early

1982 Southwest Arkansas. In A State Plan for the Conservation of Archeological Resources in Arkansas, edited by Hester A. Davis, pp. SW1-SW149. Research Series 21. Arkansas Archeological Survey, Fayetteville.

Story, Dee Ann

- 1978 Some Comments on Anthropological Studies Concerning the Caddo. In Texas Archeology, Essays Honoring R. King Harris, edited by Kurt D. House, pp. 46-68. Southern Methodist University Press, Dallas.
- 1981 An Overview of the Archeology of East Texas. Plains Anthropologist 26(92):139-156.
- 1990 Cultural History of the Native Americans. In *The Archeology and Bioarcheology of the Gulf Coastal Plain: Volume 1*, pp. 163-366, by Dee Ann Story, Janice A. Guy, Martha D. Freeman, Barbara A. Burnett, Jerome C. Rose, D. Gentry Steele, Ben W. Olive, and Karl J. Reinhard. Research Series No. 38. Arkansas Archeological Survey, Fayetteville.

- 1997 1968-1970 Investigations at the George C. Davis Site, Cherokee County, Texas. *Bulletin of the Texas Archeological Society* 68:1-113.
- 2000 Introduction. In *The George C. Davis Site*, *Cherokee County*, *Texas*, by H. Perry Newell and Alex D. Krieger, pp. 1-31, 2nd Edition. Society for American Archaeology, Washington, D.C.

Story, Dee Ann, and Sam Valastro, Jr.

1977 Radiocarbon Dating and the George C. Davis Site, Texas. *Journal of Field Archaeology* 4(1):63-89.

Webb, Clarence H.

1959 The Belcher Mound: A Stratified Caddoan Site in Caddo Parish, Louisiana. Memoirs No. 16. Society for American Archaeology, Salt Lake City.

Webb, Clarence H. and Hiram F. Gregory

1986 The Caddo Indians of Louisiana, Second Edition. Department of Culture, Recreation and Tourism, Louisiana Archaeological Survey and Antiquities Commission, Anthropological Study No. 2, Baton Rouge.

Webb, Clarence H., and Ralph McKinney

1975 Mounds Plantation (16CD12), Caddo Parish, Louisiana. Louisiana Archaeology 2:39-127.

Weinstein, Richard A., David B. Kelley, and Joe W. Saunders

2003 Introduction. In *The Louisiana and Arkansas Expeditions of Clarence Bloomfield Moore*, edited by Richard A. Weinstein, David B. Kelley, and Joe W. Saunders, pp. 1-213. The University of Alabama Press, Tuscaloosa.

Lake Naconiche Archaeology And Caddo Origins Issues

Timothy K. Perttula

INTRODUCTION

Sometime around ca. A.D. 800, Lake Naconiche sites were no longer occupied by Woodland period groups of the Mossy Grove culture (Figure 1) solely making sandy paste pottery or living as mobile hunting-gathering foragers. At this time, from ca. A.D. 750-800 to around A.D. 900 (see Perttula and Nelson 2004:Figures 4 and 5), colder and drier conditions began to dominate the local weather. After ca. A.D. 800, were the aboriginal groups Caddo peoples or acculturated Mossy Grove folks? Some findings from the Lake Naconiche (Figure 2) archaeological investigations at the Boyette site (41NA285) are relevant to this issue of ethnic affiliations and local, but nevertheless regional momentous, cultural changes.

Putting that in context, as best as can be discerned in the archaeological records of the Woodland period occupations at the Naconiche Creek (41NA236) and Boyette sites (Perttula 2008:646-650, 663-668, 674-680), if there is any evidence of increasing sedentism, it is only apparent after ca. A.D. 400 or perhaps even as late as ca. A.D. 650, during the latter part of the period. Even so, these occupations were not sedentary in the sense of them being year-round occupations (as with the Caddo settlement history at Lake Naconiche) or even multiseasonal occupations. The sites do not have accumulations of midden deposits, there is no evidence for the construction of sturdy wood structures, and there are only a very modest assortment of burned rock, pit, or post hole features at the Woodland period sites. It is hard to disagree with Story's (1995:237) characterization of Woodland period settlements in the general area that they reflect "intermittent encampments by a relatively small group or groups over a considerable period of time."

Woodland period sites are widely distributed on many different kinds of landforms, implying the generalized use of a wide variety of habitats for settlements as well as foraging pursuits. Without a more fine-grained Woodland period chronology for Mossy Grove culture sites in East Texas, which we are a long way from achieving, it is not possible to evaluate suggestions by Corbin (1998) that there were subtle shifts on the landscape of peoples that may have been a response to changes in subsistence (i.e., the possible growing of cultivated plants). The absence of cultigens other than squash from Woodland contexts in the Lake Naconiche paleobotanical record (see Dering 2008) casts some doubt on the assertion that horticultural economies were developed during this time locally, although the number of flotation and fine-screen samples from pre-A.D. 800 contexts is still miniscule. Thus, the virtual absence of cultigens from Woodland times does not yet constitute a robust evaluation of Corbin's suggestion.

The development of sedentary life along Naconiche Creek appears to have taken place after ca. A.D. 800 by successful hunter-gatherer foragers and pottery makers, specifically amongst the earliest Caddo residents of the valley. Neither the adoption of pottery or the adoption of horticultural subsistence strategies (i.e., the cultivation of maize) appear to have been triggering events that led to the ability of these people to maintain multi-seasonal residences in the same places.

THE CASE OF THE BOYETTE SITE

The Boyette site has archaeological deposits that are relevant to the discussion of Caddo origins. Our work here consisted of extensive block excavations (Block I and II) on an upland ridge toe slope, and small alluvial terrace above Telesco Creek (Figure 3a-b); the site covers ca. 1.2 acres (Perttula 2008:181-209).

The relevant characteristics are as follows: first, there are radiocarbon-dated features and



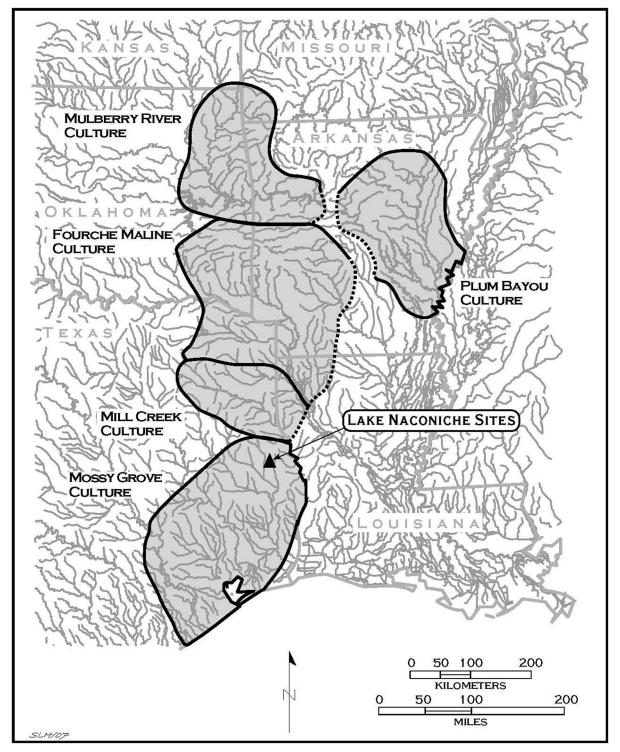


Figure 1. Woodland period cultures in the Caddo archaeological area.

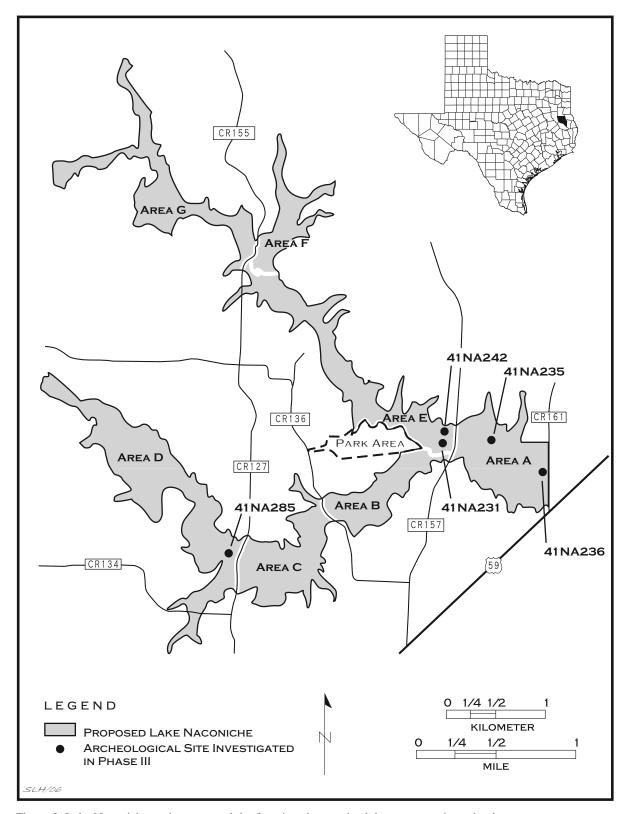


Figure 2. Lake Naconiche project area and the five sites that received data recovery investigations.

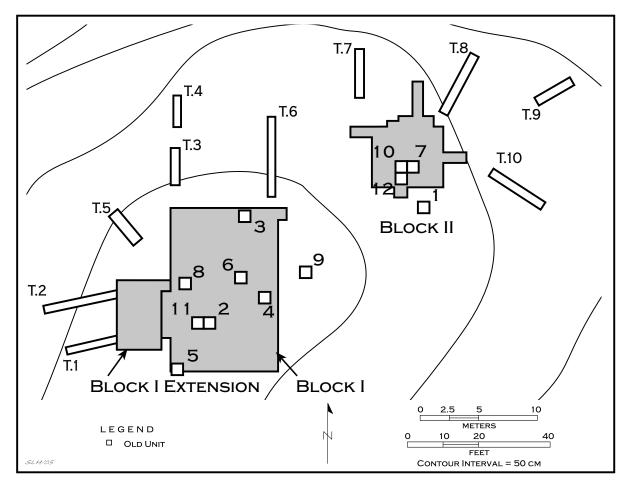


Figure 3a. The Boyette site: map of the excavations.

archaeological materials at the site that fall in the general temporal interval of interest, ca. A.D. 800-850—as well as immediately before and after that time—when the Caddo cultural tradition is generally acknowledged to become recognizable in the archaeological record in East Texas (cf. Story 2000). Second, there are relatively discrete Late Woodland (ca. A.D. 400-800) (or late Mossy Grove) and Early Caddo (ca. A.D. 800-1000) archaeological deposits at the site, and these contain some features and an extensive ceramic material culture record. Finally, the character of the ceramics from both components suggest continuities in some aspects of ceramic style and technology from the Late Woodland to the Early Caddo occupation, providing hints of from whence at least some East Texas Caddo groups may have originated.

Radiocarbon dates

Seven calibrated radiocarbon dates are pertinent, three from Late Woodland features in the northern part of Block I, and four dates from Early Caddo deposits and features in Block II (Table 1; see Perttula 2008:Table 4-26); there is also an older Woodland period date from deep in Block II. Both blocks have reasonably stratified Woodland and Early Caddo archaeological deposits. In Block II, Fea. 3 and Fea. 36 are stratified hearths associated with structural remains and post holes.

The Woodland period dates from Block I are from the lower archaeological deposits; the Early Caddo remains above them are undated. The Early Caddo period dates from Block II are from the upper archaeological deposits there; with the exception of the one date from Fea. 42, the Woodland period deposits are undated here. The decorated sandy paste ceramics, mostly of Late Woodland age, and the tempered Caddo decorated ceramics, indicate that the Late Woodland and Early Caddo deposits from both blocks are very likely to be contemporaneous.

The Late Woodland component at the Boyette site has a mean 2 sigma calibrated age range of AD 667-847, with a mean calibrated intercept of AD

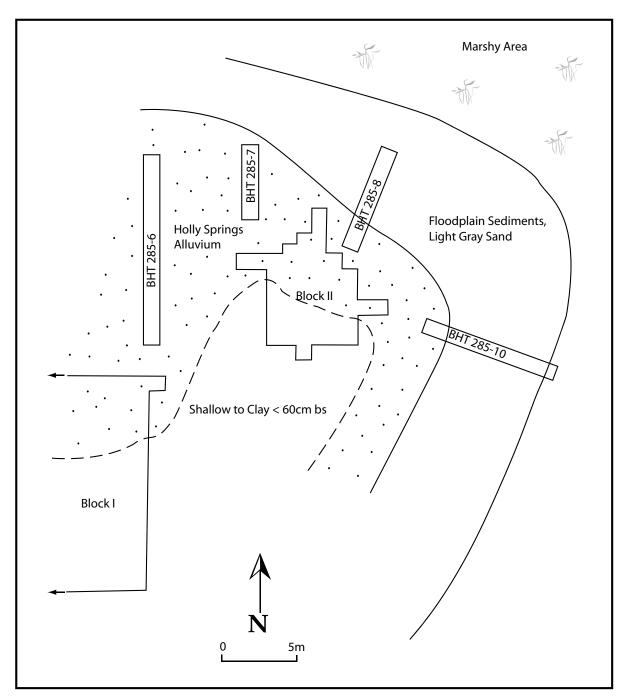


Figure 3b. The Boyette site: sediments across the site.

743. The mean 2 sigma calibrated age range of the Early Caddo occupation is AD 873-1075, with a mean calibrated intercept of AD 960. Temporal differences between the four Early Caddo dates suggest that there may be have been two occupations during the period at Boyette (although such cannot be recognized in the archaeological deposits): one with a mean age range at 2 sigma of AD 750-990 (mean calibrated intercept of AD 890) (see Table 1), and the other with a mean age range of AD 995-1160 at 2 sigma and a mean calibrated intercept of AD 1030 (see Table 1).

Late Woodland sandy paste sherds

Sandy paste plain sherds (Goose Creek Plain, var. unspecified) are abundant at the Boyette site, Block I excavations, especially in the lower

Table 1. Radiocarbon dates from the Boyette site.

Block	Context	2 sigma cal.	cal. intercept	
Woodland				
Block I	Fea. 1/9, 60-87 cm	AD 680-890	AD 780	
Block I	Fea. 1/10, 74-90 cm	AD 650-770	AD 680	
Block I	Fea. 1/14, 60-80 cm	AD 670-880	AD 770	
Block II	Fea. 35, 100-108 cm	360-60 BC	190 BC	
Early Caddo				
Block II	20-40 cm	AD 1010-1180	AD 1040	
Block II	Fea. 3	AD 790-1000	AD 900	
Block II	Fea. 36	AD 710-980	AD 880	
Block II	Fea. 42	AD 980-1140	AD 1020	

archeological deposits (50-100 cm bs) and in Feature 1/10 (Table 2) at the northern end of the block. The distribution of plain sandy paste sherds in the upper 50 cm bs appears to be predominantly a product of the contemporaneous use of sandy paste wares and grog-tempered pottery wares by Early Caddo groups living at the site (see below), while those from lower depths (where decorated sandy paste sherds are not especially common relative to the proportions seen in the overlying Caddo occupation) are considered

primarily to be from a substantial Late Woodland period occupation.

The plain sandy paste rim sherds from Block I are almost always from direct or vertical walled vessels (92%). There are a few rims with inverted (4%) or everted (4%) rim profiles. About 71% have rounded lips, 21% have flat lips, and two others are beveled (either towards the interior or exterior vessel wall surface). Another has a rounded, but exterior folded lip—commonly seen in Caddo pottery

Table 2. Plain sandy paste sherds from the Boyette site, Block I.

Level	Rim	Body	Base	N	% SP*	
Upper comp	onent					
1	8	89	5	102	20.9	
2	3	129	7	139	25.0	
3	8	118	6	132	21.3	
4	9	134	8	151	31.3	
5	5	62	3	70	22.5	
Lower comp	onent					
6	7	80	4	91	46.2	
7	5	66	4	75	65.0	
8	-	20	2	22	55.0	
9	2	30	_	32	70.0	
10	-	11	_	11	85.0	
Features	2	22	-	24		
Totals	49	761	39	849	29.1	

^{*}proportion of plain sandy paste sherds among all plain sherds (both tempered and non-tempered)

vessels from the site—and another has a rounded but pointed lip.

Vessels range from 11-34 cm in orifice diameter. The mean orifice diameter of these vessels—most likely cooking jars and bowls—is 18.4 ± 4.6 cm, generally medium-sized on average. The plain sandy paste pottery vessels from the Boyette site have relatively thin walls and a rounded, thick base. Rim walls on average range from 6.75-7.16 mm; vessel walls are on average 6.92-7.18 mm in thickness, indicating the manufacture of smoothed and uniform vessel wall contours of medium thickness, well-suited to cooking use. Base sherds of sandy paste pottery range from 10-10.87 mm in thickness at the site, with the thickest bases among the plain sandy paste sherds from the Early Caddo component in Block I. About 16-18% of the vessel sherds have been smoothed or floated on interior and/or exterior vessel surfaces. The smoothing was done before the vessel was fired, and while the clay paste was malleable.

There is not much difference between Woodland and Early Caddo components in how the sandy paste pottery vessels were fired by aboriginal potters at the Boyette site (Table 3), indicating a technological continuity. Between 59.4-66.7% of the sherds are from vessels fired in a reducing environment, although in the earlier component more vessels were apparently left to cool in the fire rather than pulled from it to be cooled in the open air. Firing in an oxidizing or incompletely oxidizing environment was not the preferred firing method during either archaeological component.

Sherds that are from vessels that were smothered, sooted, or possibly reheated comprise between 11-14.0% in the two components. The relative frequency of these firing conditions in vessel sherds is comparable to that documented from the plain sandy paste sherds in Block II at Boyette.

There are 245 plain sandy paste sherds from Block II at the Boyette site (Table 4), including 23 plain rims and four base sherds, all from rounded base vessels. The highest proportions of sandy paste sherds occur below 50 cm bs.

The rim sherds (both plain and decorated) have direct (91%), inverted (4.5%), and everted (4.5%)rim profiles. One has a beveled lip, 50% have a rounded lip, another 42% have flat lips, and one other has a pointed lip. The mean orifice diameter of the sandy paste vessels from Block II at the Boyette site is 19.0 ± 3.63 mm, with a range of 13-29 cm. Medium to large-sized vessels were used in Woodland period times at the Boyette site. About 55% of the vessel sherds have been smoothed on interior and/or exterior surfaces, smoothing occurring a bit more commonly on the vessel exterior (57%) compared to the vessel interior (54%). Less than 1% have been burnished, and 2% have remnants of organic residues preserved on them.

The majority of the plain sandy paste sherds from Block II are from vessels fired in a reducing environment, regardless of depth (62.7-70%); most of these were subsequently cooled in an open or oxidizing environment (Table 5). Incompletely oxidized vessel sherds are notably more abundant in the 0-50 cm component, while sherds from thoroughly oxidized vessels are more abundant in the probable Woodland period deposits below 50 cm bs (Table 5). The distinctive smudged, sooted, or reheated vessel sherds account for 12.5-15% of all the vessel sherds from the various block contexts, comparable to the sandy paste vessel sherds from the Block I sandy paste sherds from the Boyette site, and the tempered wares from the deepest archaeological deposits in Block II.

Table 3	Firing conditions	of nlain candy n	acte cherde Rla	ock I at the Roye	te cite
Table 5.	riring conditions	OL DIAIII SAIIUV D	aste suerus, du	ock i al life bove	ue sue.

Firing Conditions	0-50 cm	50-100 cm	Features
Oxidizing	12.5*	8.3	4.3
Incompletely Oxidized	16.1	11.1	4.3
Reducing	23.0	35.2	26.1
Reducing, cooled in open air	36.4	31.5	56.5
Smothered, sooted, reheated	11.0	14.0	4.3
Totals	256	108	23

^{*}percent

68

Table 4. Plain sandy paste sherds from the Boyette site, Block II.

Level	Rim	Body	Base	N	% SP*
Upper compor	nent				
1	_	18	_	18	51.4
2	1	19	_	20	37.0
3	1	23	_	24	51.1
4	4	25	_	29	54.7
5	1	28	1	30	61.2
Lower compor	nent				
6	1	28	_	29	61.7
7	7	24	1	32	84.2
8	6	29	_	35	64.8
9	1	12	1	14	60.9
10	_	_	_	_	_
11	1	2	_	3	100.0
12	_	3	_	3	100.0
Totals	23	218	4	245	56.5

^{*}proportion of plain and decorated sandy paste sherds among all sherds (tempered and non-tempered)

Table 5. Firing conditions of plain sandy paste sherds, Block II at the Boyette site.

Firing Conditions	0-50 cm	50-120 cm	Features	
Oxidizing	3.9*	11.7	12.5	
Incompletely oxidized	19.6	5.0	_	
Reducing	25.5	30.0	37.5	
Reducing, cooled in open air	37.2	40.0	25.0	
Smothered, sooted, reheated	13.8	15.0	12.5	
Totals	51	60	8	

^{*}percentage

There are also decorated sandy paste sherds found in the deeper archaeological deposits in Block I and Block II at the Boyette site (Table 6). In Block I, 8.3% of the sandy paste sherds are decorated in this earlier Woodland archaeological component, compared to 11.9% decorated among the overlying Early Caddo component sandy paste sherds.

The decorated sherds from the lower archaeological deposits in Block I include incised (56.5%), punctated (17.4%), incised-punctated (21.7%), and rocker stamped sherds (4.3%). The absence of lip

notched rim sherds is telling with respect to the likely age of the Woodland period occupation in Block I, in that lip notched rims appear to be more abundant in pre-A.D. 300 contexts at Lake Naconiche (Perttula 2008:433).

Incised sandy paste vessel sherds are more common in the lower Block I archaeological deposits, while incised-punctated vessel sherds are more common in the upper Caddo component (see Perttula 2008:Table 7-4). The incised sherds are primarily from vessels decorated with a series of parallel—

Table 6. Decorated sandy paste sherds from the lower Woodland component at the Boyette site, Block

Decorative Element	No. of sherds	
Incised		
parallel incised-V-shaped line	7	
parallel incised, broad line	1	
broad opposed incised lines	2	
diagonal incised	1	
broad curvilinear incised line	1	
horizontal and diagonal incised	1	
Subtotal	13	
Punctated		
small circular punctated rows	1	
curvilinear circular punctated rows	1	
tool punctated rows	2	
Subtotal	4	
Incised-Punctated		
straight incised line-circular punctated row	1	
broad incised line-triangular zone filled with	1	
large circular punctations		
incised line-circular punctated zone	1	
horizontal, circular, and panel incised zones		
filled with tool punctates	1	
broad incised line and tool punctations	1	
Subtotal	5	
Rocker stamped	1	
Totals	23	

probably horizontal—lines, although opposed, curvilinear, diagonal, and horizontal-diagonal elements are also present (Figure 4). This is not much different than the incised sandy paste sherds in the overlying Caddo component.

Punctated sandy paste sherds include circular as well as tool punctated elements. These punctations are arranged in either straight or curvilinear rows (see Figure 4). The predominance of circular punctations is also characteristic of the punctated sandy paste sherds from the overlying Caddo component.

The incised-punctated sherds have either circular/semi-circular, triangular, or paneled incised zones filled with tool punctations or large circular punctations (see Figure 4). Sixty percent of the incised-punctated sandy paste sherds from this component have circular punctations, compared to 40% of the incised-punctated sandy paste sherds in the later Caddo component in Block I. Circular zones filled with punctations are common in the small sample from the Woodland deposits in Block I, but not in the overlying prehistoric Caddo component. The incised lines are a mix of narrow V-shaped and broad, shallow lines.

The one rocker stamped body sherd in Block I has a single row of rocker stamps, obviously part of a larger decorative element probably consisting of curvilinear incised zones filled with rocker stamping. This particular rocker stamped pottery may be an example of Marksville Stamped, var. Troyville

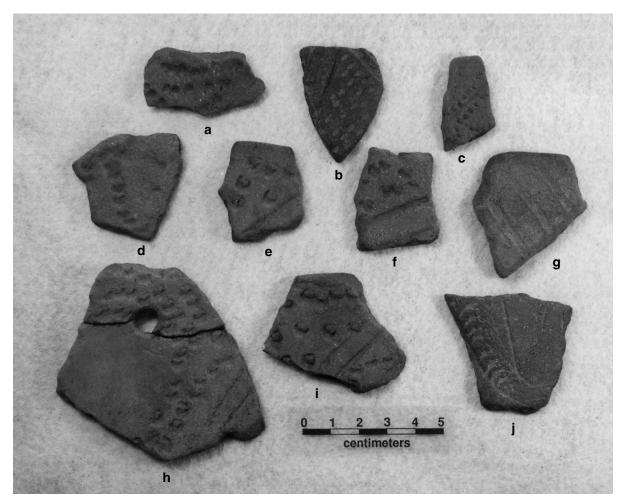


Figure 4. Sandy paste decorated sherds from Block I: a-c, e-f, h-i, incised-punctated; d, punctated; g, incised; j, incised and rocker stamped.

(see Brown 1998), dated from ca. A.D. 100-300 in the lower Mississippi valley; Girard (2008 personal communication) suggests that Troyville pottery may date as late as the period of ca. A.D. 400-700 in the lower Mississippi valley, and thus the occurrence of this sherd at the Boyette site would not be out of place in a late Mossy Grove context.

The Block II decorated sandy paste sherds (n=16) at Boyette include incised (43.8%), incised-punctated (37.5%), lip notched (12.5%), and incised-rocker stamped (6.3%). The decorated sherds comprise only 6.1% of all the sandy paste sherds from the Block II excavations at Boyette.

The incised sandy paste Woodland sherds have straight-line elements. This includes single straight broad lines (n=1), single straight V-shaped lines (n=3), rim sherds with broad but shallow horizontal and vertical incised lines (n=2), and broad straight and diagonal incised lines (n=1).

Among the incised-punctated sandy paste sherds from Block II, the designs consist of straight incised lines forming triangular zones filled with punctations of various sorts. Punctations used as filler include tool (n=3) and circular (n=2) punctations. One body sherd—from a sandy paste carinated bowl—has straight incised lines with one row of circular punctations alternating with a row of tool punctations.

The one incised-rocker stamped sherd (40-50 cm bs, probably Marksville Stamped, *var. Troyville*) has a broad and shallow incised line, probably part of a curvilinear zone filled with rocker stamping. The lip notched rims (both from below 50 cm bs) have shallow opposed notches along the lip.

Early Caddo sandy paste sherds

There are 103 decorated sandy paste sherds recovered from the Block I excavations at the

Table 7. Decorated sandy paste sherds from the upper Early Caddo component at the Boyette site.

	•
Decorative Element	No.
Incised	
single straight incised line	2
single broad incised line	2
parallel incised-V-shaped line	13
parallel incised, broad line	1
cross-hatched incised	1
opposed incised lines	4
diagonal incised	3
single curvilinear incised line	1
broad straight and curvilinear incised	1
horizontal incised, V-shaped lines	1
horizontal and diagonal incised	1
deep zigzag incised lines*	1
Subtotal	31
Punctated	_
small circular punctated rows	3
large circular punctated rows	4
circular punctated panel	1
tool punctated rows	4
cane punctated rows	1
Subtotal	13
Incised-Punctated	
straight incised line-large circular punctations	2
straight incised line and small circular punctations	3
single broad incised line with large circular punctations	1
broad incised line-triangular zone filled with large circular punctations	1
broad incised line-circular zone filled with circular punctations	1
diagonal incised-triangular zone filled with large circular punctations	2
broad diagonal incised-triangular zone filled with tool punctations	3
opposed incised-triangular zone filled with tool punctations	1
opposed incised-triangular zone filled with large circular punctations	1
broad parallel incised with curvilinear rows of circular punctations	1
horizontal and circular incised with circular zone of tool punctates	1
broad parallel incised with circular tool punctated zone	1
broad incised line and triangular zone filled with tool punctations	1
broad incised line and tool punctations	1
parallel incised-large tool punctated rows	1
parallel incised-tool punctated zone	3
circular incised zone filled with tool punctations	1
straight incised line and circular zone filled with tool punctations	1
straight incised line and triangular zone filled with tool punctations	4
Subtotal	30

Table 7. (Continued)

Decorative Element	No.	
Incised-Rocker Stamped		
shallow incised-rocker stamped	2	
shallow zoned incised-rocker stamped	1	
broad curvilinear incised line-rocker stamped	1	
Subtotal	4	
Rocker stamped	1	
Lip notched	1	
Totals	80	

^{*}bottle

Boyette site. More than 75% of these distinctive sherds were found from 0-50 cm bs in an Early Caddo occupation; three others were found on the surface in the West Block Extension, and one came from a feature (Table 7). The proportion of decorated sandy paste sherds in the overall sandy paste sherd assemblage recovered in this component is 11.9%, a good bit higher than in earlier Woodland period ceramic assemblages from Block II at Boyette or at the Naconiche Creek site (41NA236) in pre-A.D. 400 contexts. This proportion of decorated sherds among the sandy paste sherds in the upper 50 cm of Block I is still twice as low as is documented in the tempered Caddo wares from the site (ca. 24%).

The sandy paste decorated sherds from the upper component at the Boyette site are primarily represented by incised (37.5%), incised-punctated (37.5%), and punctated (16.3%) decorative elements. There are a few—and almost assuredly mixed or incorporated into the overlying Caddo component from the underlying Woodland period deposits—incised-rocker stamped sherds (5%), one rocker stamped sherd (1.3%), and one lip notched sherd (1.3%).

The incised sherds are dominated by straight-line motifs, either parallel, horizontal, opposed, diagonal (see Figure 4g), cross-hatched in a few instance, or a combination of horizontal and diagonal lines, all probably on vessel rims and/or upper vessel bodies. The same range of incised sherd decorative elements have been documented in the tempered Caddo wares from the Boyette site, but not in the same proportions. Among the sandy paste incised sherds, there is a much lower proportion of cross-hatched decorations (although the relative frequency of cross-hatching is not much different than is documented among

the tempered Caddo wares from Block II), as well as lower amounts of both horizontal and diagonal incised decorative elements in the sandy paste sherds from Block I. Most of the incised lines are narrow and V-shaped in profile, although about 17% have broad incised lines. Two incised sherds have curvilinear incised elements, roughly comparable in proportions (6.4%) to the tempered Caddo incised sherds from Block I. One incised body sherd has deep and narrow zigzag incised lines (not duplicated among the tempered incised sherds from the Boyette site); its interior thickened body suggests this sherd is part of a sandy paste bottle.

Among the incised-punctated sandy paste sherds, there is also a wide variety of decorative elements. Most consist of straight, diagonal, or opposed incised lines (occasionally broad-lined but mostly narrow and V-shaped) that have created triangular or circular zones filled with different sorts of punctations on vessel rims. Triangular punctatedfilled zones are most common (see Figure 4a-b), although there are circular punctated-filled zones on a few sherds; circular punctations typically filled these incised zones. Again, these characteristics of the sandy paste incised-punctated sherds from the Boyette site are basically the same seen on the tempered Caddo incised-punctated sherds, although the frequency of curvilinear-circular zonedincised-punctated sherds are much less common (6.7%, compared to between 29-49% of all the incised-punctated tempered Caddo sherds) among these sandy paste decorated sherds. Furthermore, fingernail and linear punctated-filled zones are absent among the sandy paste incised-punctated sherds, and the frequency of tool punctated elements (60% of the incised-punctated sherds have tool punctations) is considerably higher in the sandy paste sherds from Block I at the Boyette site.

One distinctive sherd (with a suspension hole) has broad and deep incised lines above two or three curvilinear rows of large circular punctations (see Figure 4h). A large suspension hole has been drilled through one of the curvilinear punctated rows. Another sherd has a single straight incised line with closely nestled small tool punctations on either side of the line; it does not appear to be part of a punctated-filled triangular incised element.

The punctated sherds include tool (see Figure 4d), cane, and circular punctated (also probably made with a tool, but the circular punctated marks are sufficiently distinctive to warrant a different categorization) elements. Most of the Block I punctated sandy paste sherds have circular punctations (61.5%), either small or large in execution; the Caddo punctated sherds are mostly made with a tool that was triangular-shaped on its end, although circular punctated elements are characteristic of the Early ceramic set defined from the Boyette Caddo decorated sherds. The large circular punctations are deeply tool impressed—probably with a cane tool—causing a raised ridge of clay inside the punctation itself. The small circular tool punctations are pin-prick-sized (preserving the impression of the small tool head) and usually occur in narrow rows; these latter punctations have no counterpart in the tempered Caddo punctated sherds. Another notable difference between the sandy paste punctated sherds and the tempered punctated sherds is the absence of both fingernail or linear punctations among the former.

In summary, while incised, punctated, and incised-punctated decorative elements are present in both the sandy paste sherds (from 0-50 cm bs) and the tempered Caddo sherds from the Block I ceramic assemblage at the Boyette site (see Table 7), the two different assemblages do not have the same proportion of specific elements or motifs. Although sample size differences may play a role in the fact that there are considerable proportional differences between the two assemblages—or they may be in fact stylistically different (and hence temporally different?)—nevertheless the same decorative decisions were made by the potters that decorated the two wares. That is, among the incised sherds, simple straight and geometric designs were preferred; the punctated sherds were decorated most commonly with straight rows of punctations executed with a tool; and incised-punctated sherds usually had triangular incised zones filled with punctations. Usually, the incised zoned were filled with triangular punctations. This suggests that both wares were made during the Early Caddo occupation in Block I at Boyette.

Among the decorated sandy paste sherds from the Boyette site are a few larger sherds where vessel forms could be determined. Most appear to be from straight-walled vessels—probably jars and bowls with rounded bases—but there is at least one bottle sherd and several sherds from carinated bowls (one with rows of small circular punctations and another with opposed incised lines). The same kinds of vessel forms were noted in the tempered Caddo decorated wares.

Early Caddo tempered ceramics

The Early Caddo ceramics at Lake Naconiche are distinguished by engraved fine wares (Figure 5ab) and incised, punctated, and incised-punctated utility wares. Among the rims from bowls and carinated bowls, Holly Fine Engraved is only present in Block II at the Boyette site (Table 8), and is certainly the most distinctive engraved ware in the Early Caddo ceramic set. Also in Block II, other common rims have sets of horizontal lines, diagonal lines, vertical and horizontal lines, or broadly excised horizontal and vertical engraved lines. These latter rims are from a vessel with a non-tempered sandy paste, suggesting there is a temporal relationship between this early engraved element and the continued use of sandy paste pottery, which is otherwise being made and used for plain or simple decorated vessels in East Texas up until the 9th century A.D. or later.

Early set engraved rims from Block I include a wide variety of decorative elements, primarily geometric designs (i.e., diagonals and opposed lines) as well as sets of horizontal lines (see Table 8), but geometric and horizontal engraved decorations are characteristic of Lake Naconiche engraved wares from the earliest to the latest prehistoric Caddo ceramics. More distinctive engraved rim elements include cross-hatching and hatched zones (oriented in diagonal, curvilinear, and vertical directions on the rim), as well as cross-hatched and hatched pendant triangles and a circle and cross (Figure 6). Although the low number of engraved rims from Block II precludes definitive conclusions, it is interesting to note the absence of hatched engraved rims in these archeological deposits, but their relative frequency in the Block I engraved sherd assemblage (see Table



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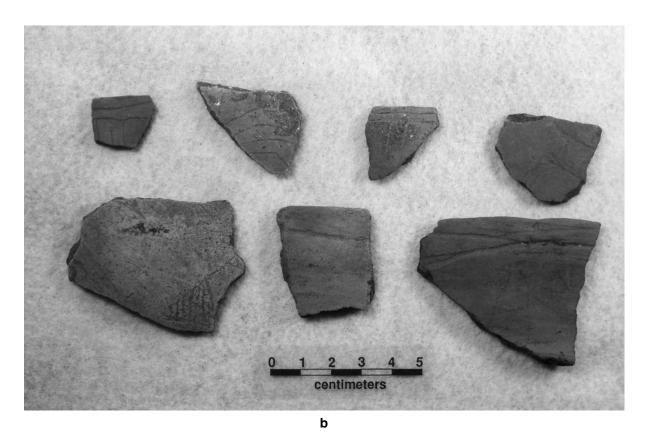


Figure 5. Engraved rim and body sherds from the Boyette site: a, Block I; b, Block II.

Element	Block I	Block II
cross-hatched lines	15.0*	_
cross-hatched pendant triangle	1.7	_
circle and cross	1.7	_
hatched zones	18.3	_
Holly Fine Engraved	_	27.3
horizontal lines	16.7	36.3
horizontal-vertical lines	3.3	18.2**
horizontal and diagonal lines	3.3**	_
diagonal lines	25.0	18.2
diagonal and opposed lines	1.7	_
opposed lines	3.3	_
vertical lines	1.7	_
hatched pendant triangles	5.0	_

60

Table 8. Engraved rim decorative elements at the Boyette site.

8). Given that hatched rims are also rather common in the Middle Caddo ceramics, their occurrence in Block I at the Boyette site suggests that the earliest Caddo occupation comprising the Early Caddo ceramic set was in Block II, followed by Block I.

One of the rims has deeply excised horizontal and diagonal lines, all enclosed within a rectangle (see Figure 61). This particular rim is from a sandy paste non-tempered vessel. A larger rim of the same vessel was recovered from Unit 3 in the test excavations at the Boyette site (Perttula 2002:Figure 4.107a).

Early Caddo engraved body sherds from Block II include hatched pendant triangles (Figure 7c, f) and Holly Fine Engraved (Table 9). Engraved body sherds in Block I are dominated by cross-hatched, hatched zones, and sherds with curvilinear elements, as well as large pendant triangles. Holly Fine Engraved sherds comprise 6% of the engraved body sherds.

In addition to these distinctive Early Caddo engraved body sherds, a goodly number also have simple straight or geometric elements, including horizontal lines, parallel lines, opposed lines, diagonal lines, and vertical lines. These body sherds comprise 28.1% of the Block I engraved body sherds (see Table 9).

The Early Caddo engraved bottle sherds from Block II at Boyette are dominated by Holly Fine Engraved sherds (Table 10). The others have simple sets of either parallel or curvilinear-horizontal lines, possibly also from Holly Fine Engraved bottles (see Suhm and Jelks 1962:Plate 40e, g).

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The bottle sherds from Block I at the Boyette site, also part of the Early Caddo ceramics, primarily have sets of curvilinear engraved lines, but both Hickory Engraved and Holly Fine Engraved bottles comprise part of this distinctive engraved assemblage (see Table 10). Less common, but still apparently diagnostic of the Early Caddo ceramic set are semi-circles and panel and negative oval elements (see Table 10).

Boyette site vessel

The one vessel from a funerary context at the Boyette site is a Holly Fine Engraved globular bowl from Feature 13A in Block II (Figure 8a). The engraved decoration is confined to the rim, and consists of sets of 12 large triangular panels around the rim filled with diagonal engraved lines that are pitched in opposite and alternating directions from one triangular panel to the next (Figure 8b). Each large triangular panel has an excised triangle in one corner, alternating from the top left to the bottom left corners from one panel to another. There is a single horizontal engraved line that encircles the bottom of the rim and each of the triangular panels; rim height is 4.9 cm.

^{*}percentage; **both sandy paste

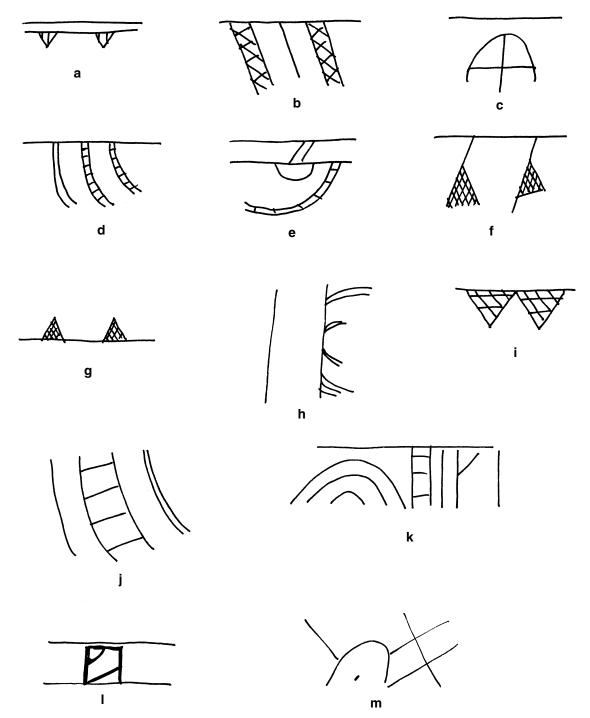


Figure 6. Distinctive Early Caddo engraved elements from Block I at the Boyette site.

The bowl is 14.71 cm in height, with a 14.68 cm orifice diameter. It is tempered with grog, and was fired in a reducing environment, then allowed to cool in the open air. The rim is 5.2 mm thick, the body is 6.2 mm thick, and the flat base is only 5.7 mm thick. The exterior vessel surface is well

burnished, as is the interior rim area; the interior vessel body is poorly smoothed. There are small patches and flecks of charred organic remains on the lower exterior vessel body, and in one area along the body-base juncture on the vessel interior, as well as several fire clouds.

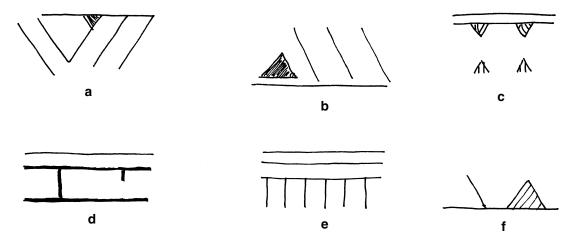


Figure 7. Distinctive engraved elements from Early Caddo sherds in Block II at the Boyette site.



Figure 8. Holly Fine Engraved vessel from Feature 13A: a, photograph; b, drawing of the rim motif.

Table 9. Engraved body sherd decorative elements, carinated bowls and bowls, from the Boyette site.

Element	Block I	Block II	
large pendant triangle	7.5*	50.0	
Holly Fine Engraved	6.0	25.0	
cross-hatched lines	19.4	_	
cross-hatched zone	3.0	_	
horizontal	2.2	_	
horizontal and diagonal lines	2.2	_	
horizontal-vertical-zigzag	0.7	_	
horizontal and cross-hatched lines	3.7	_	
horizontal and opposed lines	0.7	_	
parallel lines	8.2	_	
opposed lines	6.7	_	
diagonal lines	3.0	_	
vertical lines	0.7**	_	
hatched zones	13.4	_	
hatched zones and opposed lines	0.7	_	
hatched zones and curvilinear			
lines	3.0	_	
hatched zone and diagonal lines	0.7	_	
curvilinear/circular lines	12.7	_	
N	134	4	

^{*}percentage (do not total to 100% because non-diagnostic elements [i.e., single straight lines] are not included in the tabulation); **sandy paste

Table 10. Engraved bottle sherd decorative elements from the Boyette site.

Element	Block I	Block II	
Hickory Engraved	23.5*	_	
Holly Fine Engraved	5.9	71.4	
semi-circles	11.8	_	
panel and negative ovals	5.9	_	
parallel lines	_	14.3	
curvilinear-horizontal lines	_	14.3	
curvilinear	52.9	-	
N	17**	7	
% of all engraved body sherds	9.5	58.3	

^{*}percentage; **includes three Hickory Engraved rims

Utility Wares at Boyette

Among the incised utility wares, the decorative elements that differentiate the Early Caddo from later Caddo ceramic assemblages are the more common use of cross-hatching (including cross-hatched and horizontal sets of lines), diagonal incising on vessel bodies, and the occurrence of various Dunkin Incised motifs (Table 11) on both rim and body sherds (Figure 9d, h and Figure 10b). Cross-hatched rims comprise between 16.7-32.1% of the rims from both blocks at the Boyette site, and 2.3-2.4% of the incised body sherds have diagonal incised lines. In later Caddo ceramic assemblages at Lake Naconiche, only 3.7-6.7% of the incised rims are cross-hatched; diagonal incised rims are much more common (Perttula 2008:Table 7-10).

The punctated rim and body sherds at the Boyette site are characterized primarily by a wide variety of decorative elements (Table 12), among them being the ubiquitous tool punctated row element. However, the most distinctive punctated elements in the Early Caddo ceramics compared with later punctated utility wares is the more common use of rows of fingernail (40% of the punctated sherds, but less than 20% at each of the other Lake Naconiche sites), linear, and circular and small circular punctations as decorative elements (Table 13). Another distinctive punctated decorative element is the use of free or randomly spaced tool punctates on the vessel body.

In the case of the incised-punctated decorative elements, the Early ceramic set includes as diagnostic Weches Fingernail Impressed, var. Weches (see Figure 9b and Figure 10a), incised triangles filled with tool punctations, and in Block II at Boyette, rims with horizontal incised lines above rows of tool punctates; the latter two incised-punctated decorative elements are also present in later Lake Naconiche assemblages (Table 14). In Block I, there also are a considerable proportion of rims with curvilinear or circular incised zones filled with linear or tool punctates (see Figure 9c, e), sometimes occurring in association with diagonal incised lines

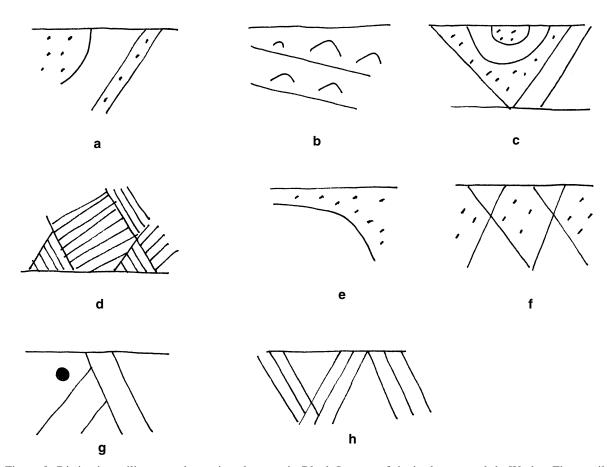


Figure 9. Distinctive utility ware decorative elements in Block I: a, c, e-f, incised-punctated; b, Weches Fingernail Impressed, var. Weches; d, Dunkin Incised; g-h, incised lines; g has a suspension hole below the vessel lip.

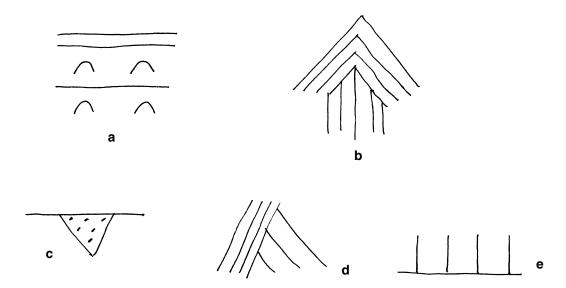


Figure 10. Block II distinctive utility ware decorative elements: a, Weches Fingernail Impressed, *var. Weches*; b, Dunkin Incised; c, incised-punctated; d, diagonal opposed incised lines; e, horizontal and vertical incised lines.

Table 11. Incised decorative elements by block.

Element	Block I	Block II	
Rim			
diagonal	26.4*	16.7	
horizontal	11.3	50.0	
horizontal-diagonal	3.8	_	
opposed	11.3	_	
cross-hatched	32.1	16.7	
vertical	_	8.3	
curvilinear	9.4	8.3	
diagonal-curvilinear	3.8	_	
Dunkin Incised	3.8	_	
N	53	12	
Body			
parallel	37.0	62.8	
horizontal and vertical	_	2.3	
opposed	9.7	14.0	
opposed-diagonal	1.2	_	
cross-hatched	18.2	_	
cross-hatched-horizontal	1.2	_	
diagonal	2.4	2.3	
vertical	0.6	_	
curvilinear-semi-circle	9.1	2.3	
Dunkin Incised	0.6	2.3	
N	165	43	

^{*}percentage

Table 12. Punctated decorative elements in the Boyette sherds.

Element	Block I	Block II	
tool punctated row	23*	42	
tool punctates	5	_	
tool punctates, free	1	_	
small tool punctates, free	11	_	
tool punctates under lip	_	2	
diagonal tool punctated row	0.7	2	
tool-fingernail punctates	0.7	2	
small cane punctate row	0.7	_	
fingernail punctated row	29	40	
fingernail punctates	11	_	
diagonal fingernail punctated row	1.3	_	
curvilinear punctate, cf. Weches	0.7	_	
linear punctates	5	11	
circular punctates	3	_	
small circular punctates	5	-	
N	149	52	

^{*}percentage

Table 13. The prevalence of punctated decorative elements by period.

Element	Early Caddo	Middle-Late Caddo*	Late Caddo
fingernail punctated row	X		
linear punctated	X		
small circular punctated row	X		
small tool punctates, free	X		
tool punctated row		X	
cane punctated row		X	
Naconiche Punctated		X	
tool punctates under lip			X

^{*}includes 41NA231, 41NA235, and 41NA242 (all apparently abandoned by ca. A.D. 1450)

and semi-circles filled with punctations (see Figure 9a); these resemble designs seen on Crockett Curvilinear Incised vessels. One Early Caddo rim has cross-hatched incised lines forming diamonds filled with punctations (see Figure 9f).

The incised-punctated body sherds in the Early Caddo ceramic assemblages from the Boyette site share one decorative stylistic tendency: the use of circular or curvilinear incised zones filled with punctates (Table 15): between 28.6-49% of the body sherds from the Boyette site blocks have this distinctive decorative element on utility wares. Both blocks at the Boyette site also have many triangular incised sherds filled with punctates: in the case of Block I, most of them are filled with tool punctates (as is also the case with the later Lake Naconiche incised-punctated ceramic assemblages), while fingernail punctates and cane punctates were more often employed to fill these incised zones in the Block II ceramics.

Incised-punctated sherds with incised lines either above or below rows of tool or fingernail punctates are particularly common in Block II at the Boyette site. As with the decorated rims, Weches

Table 14. Incised-Punctated rim decorative elements by block.

Element	Block I	Block II	
Weches Fingernail Impressed	18.2*	20.0	
diagonal incised next to tool,			
linear, or circular punctates	18.2	_	
circular or curvilinear incised			
zones filled with tool punctates	18.2	_	
curvilinear incised zones filled			
with linear punctates	4.5	_	
cross-hatched incised with			
circular punctates	4.5	_	
vertical incised with tool			
punctated zones	4.5	_	
incised panel-fingernail punctates	4.5	_	
circular-diagonal incised and			
tool punctates	4.5	_	
semi-circular and incised triangles			
filled with tool punctates	4.5	_	
incised triangles filled with			
tool punctates	9.1	20.0	
horizontal incised and rows of			
tool punctates	-	60.0	
N	22	5	

^{*}percentage

Table 15. Incised-Punctated body decorative elements.

Element	Block I	Block II
circular or curvilinear incised zones filled with punctates	49*	28.6
triangular incised zones filled with tool punctates	39	_
triangular incised zones filled with circular punctates	2.8	_
triangular incised zones filled with fingernail punctates	1.4	14.3
triangular incised zones filled with cane punctates	_	14.3
incised elements with tool punctated rows	2.8	14.3
incised elements with fingernail punctated rows	_	28.6
Weches Fingernail Impressed	4.2	_
N	72	7

^{*}percentage

Fingernail Impressed, var. Weches sherds are present in the incised-punctated body sherds characteristic of the Early ceramic set.

CONCLUSIONS

The Early Caddo occupations at the Boyette site (41NA285) appear to be contemporaneous with the earliest Alto phase component at the George C. Davis site on the Neches River, dating as the latter does from the mid-9th century A.D. However, the fine wares and the utility wares found there do not suggest that the Boyette site is a component of the Alto phase, although such sites have been identified in the Angelina River basin (see Story 2000:Figure 5). Story (2000:20) has previously pointed out that "components of this phase are no where common even though some of the diagnostics, such as Weches Fingernail Punctated and Holly Fine Engraved, have wide distributions." Such appears to be the case here, because while there are a few sherds of Holly Fine Engraved and Weches Fingernail Impressed in the Boyette site decorated sherds, they do not dominate the decorated sherd assemblages—along with Davis Incised, Dunkin Incised, Crockett Curvilinear Incised, Pennington Punctated-Incised, Hickory Engraved, and Duren Neck Banded—as they do as the George C. Davis site (Stokes and Woodring 1981: Table 24). For example, Stokes and Woodring (1981:Table 24) note that Holly Fine Engraved vessel sherds and Weches Fingernail Punctated sherds comprise both between 16-41% of the more than 14,000 decorated sherds from mound and domestic contexts across the site, and incised-punctated Crockett Curvilinear Incised and Pennington Punctated Incised sherds are also fairly well-represented (2-19% by excavation areas) at this mound center. Only a handful of sherds from the Boyette site were identified as coming from either Holly Fine Engraved or Weches Fingernail Impressed/Punctated vessels. Less than 13% of the sherds at the Boyette site have incised-punctated decorative elements, although between 30-50% of these have curvilinear zoned incised and punctated elements, few of which remotely resemble in execution Crockett Curvilinear Incised vessels. At best, then, the few similarities in vessel decorations in both fine wares and utility wares between the Boyette site and the well-known George C. Davis site are indicative of contemporaneous Caddo occupations—and perhaps even a modicum of contact/interaction—but they do not belong to the same Caddo groups. Instead, the Boyette site is apparently a component of a local and culturally separate Caddo community in the upper Angelina river basin, one that is currently taxonomically unidentified.

One question that languishes unanswered is the cultural relationship between the latest Mossy Grove sites in East Texas and the earliest Caddo sites in the region. Concerning the historical traditions of the Alto phase Caddo peoples that lived in this general area, Story (2000:25) has commented that "there are no earlier archeological remains in the middle and upper Neches River basin that can plausibly be identified as an antecedent complex to the Alto phase component [at the George C. Davis site]." She goes on to speculate that "earlier Caddoan developments [earlier than the late A.D. 800s] must have taken place elsewhere, probably to the northeast in either the Sabine or Red River basins." These suggestions go hand in hand with the notion that the George C. Davis Caddo mound center represents a founding colony in a part of East Texas that was not previously within the territory occupied by Caddo peoples.

Corbin (1989:121) also subscribes to the notion that the Caddo occupation of East Texas, or at least those areas south and west of the Sabine River, originates outside of East Texas and that the Caddo were newcomers to the region. He also proposed that the Caddo populations who had come into the area in the A.D. 800s lived coevally with the East Texas Woodland peoples (i.e., the Mossy Grove Culture peoples) who were already there, and that these Woodland peoples continued "their dispersed lifestyle, only slightly displaced on the landscape, with the additions of maize, better pottery and the bow and arrow." Under this scenario, the:

> indigenous Woodland population was acculturating and modifying some of what was early Caddo culture into their own lifestyle to create a post-early Caddoan culture we call Late Caddo on a cultural base that was already in place and never disappeared. The only place where early Caddo blinked into almost instantaneous existence in this area was at a few specific sites (Corbin 1989:124).

Probably the only means to fully evaluate the relationships between, and cultural affiliations of, the Mossy Grove Woodland period groups and the earliest Caddo archaeological sites will be extensive bioarchaeological and genetic studies of DNA, oxygen/strontium isotopes, and genetic markers preserved on human skeletal remains, as these provide the highest probability of establishing cultural and biological relationships between various groups of people recognized in the archaeological record. It is doubtful, however, that this can ever be fully achieved because to date not a single Woodland period burial has ever been found in a domestic site in East Texas, and 9th century Caddo sites are almost as rare, whether with burials or not. Furthermore, it is an open question whether DNA or traces of genetic markers left on human skeletal remains are even preserved in any such sites occupied on the cusp of the Woodland to earliest Caddo time periods.

That being said, the prehistoric occupations at the Boyette site are nevertheless relevant to the questions and scenarios posed by Story (2000) and Corbin (1989). From radiocarbon dates obtained in the excavations here, as discussed above, there are two occupations of interest, one that dates (with a 95% probability) from cal A.D. 667-847 (with a mean calibrated intercept from three dates of AD 743) and the other that dates (with a 95% probability) between cal AD 873-1075, with a mean calibrated intercept (from four dates) of AD 960. Two of the four dates have a mean calibrated age range of AD 750-990 (calibrated intercepts of AD 880 and 900), while the other two have a mean calibrated age range of AD 995-1160 (calibrated intercepts of AD 1020 and 1040). These radiocarbon ages suggest that the second occupation may be represented by two different episodes of settlement.

The earlier of the two occupations (identified in the deepest archaeological deposits in Blocks I and II) has sandy paste Goose Creek Plain and decorated Mossy Grove ceramics, Gary and Kent dart points (and probably some early arrow point forms), a few features, but no evidence of structures, middens, burials, or use of cultigens. In most respects, this early occupation at the Boyette is a fairly typical Mossy Grove period occupation. There is one (to some) troubling aspect in the material culture of this component: decorated sandy paste vessel sherds are apparently atypically abundant (more so than any other known Mossy Grove component, unless all of them have moved by bioturbation from overlying Caddo archaeological deposits, which is unlikely), and the incised, incised-punctated, and incised decorative elements almost early presage the same ceramic vessel decorations noted in the later ca. AD 985 component. In the latter occupation, these styles of vessel decoration are common on both sandy paste and tempered pottery wares. There are at least a few examples of non-traditional vessel forms in the ca. AD 743 component, including carinated bowls and a bottle. Such vessel forms are well represented in the later ca. AD 985 component, as they are in post-A.D. 1100 Naconiche Caddo ceramic vessel assemblages.

What about the ca. AD 985 component: is it affiliated with the Caddo or is it an acculturated Mossy Grove site? First, it can be noted that cultigens are absent in the archaeological deposits associated with this occupation, although the numbers and arrangements of features suggest that this occupation was a relatively sedentary one as there is evidence of sequential central hearths from two different houses that date to the earlier of the two later occupational episodes (i.e., ca. A.D. 750-990 from radiocarbon, but centering around A.D. 880-900). There are stemmed arrow points in the assemblage, including those of the Alba type (the dominant type in the Alto phase) and an abundance of ceramic vessel sherds, including many from carinated bowls and bottles that have engraved designs (i.e., Holly Fine Engraved and Hickory Engraved) much like those noted from other early Caddo contexts in the region. Much of the pottery is tempered—primarily with grog—but sandy paste pottery remains an important part of the ceramic vessel assemblage in this later component. More importantly, the sandy paste pottery in this late 9th-early 10th century occupation is commonly decorated with the same decorative elements common in the tempered wares, even including some amount of engraved sandy paste pottery.

From the evidence at hand from the Boyette site at Lake Naconiche, it appears that there were changes in material culture—the use of temper in the manufacture of pottery vessels, subtle changes in vessel form, and innovations in pottery vessel decoration—that were either underway by the mid-8th century and/or had been adopted by the aboriginal peoples living along Naconiche Creek by the late 9th century, a period of some 150 years (or at least six generations). The choice and inspiration to decorate sandy paste pottery cannot be laid at the feet of any Caddo colonizers from the George C. Davis site or others of its ilk because this was taking place at least one century before the appearance of that site on the Neches River. The same may be said for the appearance of carinated bowl and bottle forms in late Mossy Grove contexts at the Boyette site. Such innovations as these appear to have developed amongst Mossy Grove groups without having to invoke a Caddo "influence," if that is relevant in the context posed by Story (2000) and Corbin (1989). Perhaps it is plausible that further ceramic innovations such as adding temper to the paste of vessels, or even choosing to decorate a vessel after it was fired rather than while the vessel still had a wet paste, were not beyond the creative reach of the people that lived along Naconiche Creek or in other areas of East Texas.

Thus, in the end, and based on admittedly very sketchy archaeological information, I do not view the 9th century occupation at the Boyette site as acculturated Mossy Grove groups influenced by the superior culture of the Caddo who were expanding into the area. Rather, I view the 7th and 8th century population at Lake Naconiche as directly antecedent to the 9th century population that lived at the Boyette site. In most particulars, the preponderance of archaeological evidence from this later occupation indicates that the population that lived there was Caddo, or at least one of many different groups living in East Texas that can be considered Caddo in an ethnic sense. The 7th and 8th century A.D. Woodland population is considered ancestral to the Caddo. This does not mean that the Woodland or earliest Caddo populations in the Attoyac Bayou basin had any ethnic or underlying genetic relationship with the founding population at George C. Davis—that issue still remains to be teased out. It does mean that the George C. Davis Caddo population was not the only one in East Texas in the 9th century A.D.

REFERENCES CITED

Brown, I. W.

1998 Decorated Pottery of the Lower Mississippi Valley: A Sorting Manual. Mississippi Archaeological Association and Mississippi Department of Archives and History, Jackson.

Corbin, J. E.

1989 The Woodland/Caddo Transition in the Southern Caddo Area. In In the Light of Past Experience: Papers in Honor of Jack T. Hughes, compiled and edited by B. C. Roper, pp. 117-124. Publication No. 5. Panhandle Archeological Society, Clarendon.

Reflections on the Early Ceramic Period and the Terminal Archaic in South Central East Texas. Journal of Northeast Texas Archaeology 11:108-116.

Perttula, T. K. (editor)

- 2002 Archeological Investigations at the Proposed Lake Naconiche, Nacogdoches County, Texas. 2 Vols. Report of Investigations No. 42. Archeological and Environmental Consultants, Austin.
- 2008 Lake Naconiche Archeology, Nacogdoches County, Texas: Results of the Data Recovery Excavations at Five Prehistoric Archeological Sites. 2 Vols. Report of Investigations No. 60. Archeological & Environmental Consultants, LLC, Austin.

Perttula, T. K. and B. Nelson

Woodland and Caddo Archeology at the Broadway or Kanduts'ah Kuhnihdahahdisa' Site (41SM273) on the City of Tyler-Lake Palestine WTP Project, Smith County, Texas. Report of Investigations No. 50. Archeological & Environmental Consultants, LLC, Austin.

Stokes, J. and J. Woodring

Native-Made Artifacts of Clay. In Archeological Investigations at the George C. Davis Site, Cherokee County, Texas: Summers of 1979 and 1980, edited by D. A. Story, pp. 135-238. Occasional Papers No. 1. Texas Archeological Research Laboratory, The University of Texas at Austin.

Story, D. A.

- 1990 Cultural History of the Native Americans. In The Archeology and Bioarcheology of the Gulf Coastal Plain, by D. A. Story, J. A. Guy, B. A. Burnett, M. D. Freeman, J. C. Rose, D. G. Steele, B. W. Olive, and K. J. Reinhard, pp. 163-366. 2 Vols. Research Series No. 38. Arkansas Archeological Survey, Fay-
- Introduction. In The George C. Davis Site, Cherokee County, Texas, by H. P. Newell and A. D. Krieger, pp. 1-31. Second edition. Society for American Archaeology, Washington, D.C.

Story, D. A. (editor)

1995 The Deshazo Site, Nacogdoches County, Texas, Volume 2: Artifacts of Native Manufacture. Studies in Archeology 21. Texas Archeological Research Laboratory, The University of Texas at Austin.

Caddo Origins, A Smith County Perspective

Mark Walters

INTRODUCTION

Attempting to trace Caddo Origins in Smith County and surrounding counties depends a lot on what we end up defining as Caddo. Separating the Caddo culture from previous cultures in East Texas becomes tedious when trying to fit the available archaeological record to existing models of Woodland cultures. Krieger stated (Suhm and Krieger 1954:158) that there was no evidence in East Texas of a Woodland (or Hopewellian) culture, with Mississippian culture beginning as early as 500 B.C. I mention this partly for the sake of argument, but also to point out that in this area there is not such a clearcut difference between the archaeology of Woodland and Early Caddo cultures. If Krieger is correct, it might make better sense to have a Formative phase of Caddo rather than trying to make a Woodland culture fit the transition from Archaic to Caddo.

Based on current thinking, Caddo culture developed around A.D. 800-900, based primarily on work conducted at the George C. Davis site. In Smith County there seem to be few sites that fit into what has been termed either the Formative and Early Caddo (A.D. 800-1200) periods or Alto phase sites as defined at the Davis site. Rather, in this area, Caddo culture reached a florescence during the following Middle Caddo (A.D. 1200-1400) time period, at least in the number and visibility of sites on the landscape. Then, for reasons that we do not fully understand, this area was apparently abandoned by prehistoric groups.

There is some question whether Caddo culture was introduced to the area either by the actual movement of peoples or an infusion of ideas, or rather developed out of the traditions of existing cultures; more likely, both processes took place. Assuming for the moment that the Caddo culture in this area evolved out of an existing culture (with an infusion of new ideas?—the glue that held it all together), what would that culture be? The

Woodland period (1000-500 B.C. to A.D. 800) is characterized by the introduction of several new technologies: introduction of the bow and arrow, more intensive agriculture in some areas, but there is little evidence to support this in East Texas, and the use of pottery. This is in conjunction with a more sedentary lifestyle. Sites of this time period have as diagnostic traits some combination of the following: small contracting stem Gary dart points, stemmed arrow points such as the Friley and Steiner types, and pottery, mostly plain, and never in great amounts. Supposedly the cultures associated with the Woodland period lead to the development of what we call Caddo culture.

One idea put forth by Schambach (1970) is that Caddo culture evolved out of the Fourche Maline culture with its particular traits. Another idea, put forth by Story (1990), is that Caddo culture evolved from not one predecessor group but rather from several different groups with distinct but relatively similar sub-traditions, these being the: (1) Arkansas River Valley; (2) Woodland edge; (3) Red River valley; and (4) Piney Woods. However, the Woodland culture in the Smith County area differs in some degree from the Fourche Maline culture on the Red River and the Mossy Grove/sandy paste culture in the southern part of the Piney Woods. On several grounds, Perttula defined this area between the two as being occupied during the Woodland period by the Mill Creek Culture (Perttula and Nelson 2004:155-170). In this part of East Texas, the Woodland sites differ from Fourche Maline in that they lack the intense middens and large amounts of pottery that otherwise characterize Fourche Maline sites; there are also no chipped hoes or Poole pipes. The sandy paste ceramic tradition of the Mossy Grove culture does not extend this far north into the northern part of Smith County. The Mill Creek sites appear to have been smaller and occupied for shorter time periods than is the case with Fourche Maline sites in the Red River valley, for instance, and are lacking the intense middens associated with the latter sites. There also seems to be very little pottery associated with these sites when compared to later Caddo sites.

Differences between Woodland and Caddo sites in this area include:

- The sheer volume and stylistic diversity of pottery on Caddo sites. Vessel forms such as bottles are apparently absent on Woodland sites. Engraving scarce or absent on Woodland sites;
- 2. Lack of permanent structures and absence of burials on Woodland sites;
- 3. Evidence of domesticated plants, especially maize, lacking on Woodland sites;
- 4. Discrete middens only on Caddo sites;
- Evidence of celts on Caddo sites, especially from southwestern Arkansas and southeastern Oklahoma source areas, but not on Woodland period sites;
- Decreasing reliance on stone tools, especially the decreasing evidence of arrow points on Caddo sites;
- 7. More local materials employed in chipped stone tool manufacture on Woodland sites:
- 8. Evidence of differences in status between peoples living on Caddo sites;
- 9. Caddo sites appear on higher elevations on the landscape than do Woodland sites; and
- The existence of a dual ceramic tradition on Caddo sites, with both fine and utility ware vessels with contrasting rim and body designs.

EXAMPLES OF RELEVANT SITES IN SMITH COUNTY

Browning Site (41SM195A)

The Browning Site is one example of the Mill Creek culture in this area of East Texas (Walters 2004). The main occupation is dated by radiocarbon and Oxidizable Carbon Ratio dating to between A.D. 600-800. This date and associated artifacts indicate

it was occupied during the latter part of what has been termed the Woodland period in the region.

Friley and Steiner are the most commonly recognized types of arrow points collected at the Browning site. Other stone tools include flake tools, seven ferruginous sandstone ground stone tools, and 12 dart points (with small Gary points the most common type).

The 40 sherds from the Browning site are discussed in detail by Walters (2009). It is noteworthy that the ceramics at the Browning site closely resemble later Caddo ceramics in thickness, surface treatment, firing, and hardness, and to some extent with respect to vessel decoration, and they would be very hard to separate from the ceramic sherds on any nearby Caddo assemblage. Twenty-eight (70%) of the sherds are grog-tempered. Another 15% have grog/hematite temper. Four (10%) have a combination of grog and bone as tempering agents; none of these sherds have an abundance of bone. Two (5%) sherds have no discernible temper. Twentysix (65%) of the sherds have been fired and cooled in a reduced oxygen atmosphere. Thirteen (32.5%) were fired in a reducing atmosphere, and then allowed to cool in the open air. One sherd (2.5%) was completely oxidized during firing.

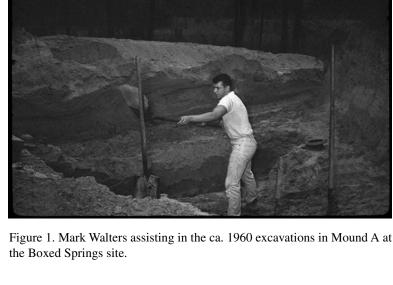
Six of the sherds at the Browning site are decorated. Three body sherds have single straight incised lines, while two sherds had two parallel straight incised lines; the distance between the incised lines ranges from 12.2-13.0 mm. The one decorated rim has a single straight horizontal incised line on it. A second rim is from what appears to be a plain carinated bowl.

The amount of ceramics at the Browning site is meager when compared to later Caddo sites in the area that are distinguished by their sheer volume of sherds. At the Browning site, the sherd density is only 1.96 sherds per m³. By comparison, in excavations at the 14th century A.D. Leaning Rock (41SM325) Caddo site, the sherd density is 280.4 sherds per m³ (Walters 2008). It is uncertain why there are so few sherds represented at Mill Creek culture sites compared to what is seen on Fourche Maline or Mossy Grove sites, but evidently ceramics played a minor role in the lives of the people that lived at the Browning and other Mill Creek sites.

Boxed Springs Mound Site (41UR30)

The Boxed Springs site is an Early Caddo (ca. A.D. 900-1200) multiple mound center in

the middle reaches of the Sabine River (Perttula and Wilson 2000). The site consists of four mounds arranged around a plaza with borrow pits, midden areas, and at least one large Caddo cemetery where some 150 graves were looted. Sam Whiteside excavated Mound A, a circular burial mound, in the 1960s (Figure 1), uncovering a rectangular pit with evidence of at least three individuals. This burial is quite similar to several shaft burials at the Gahagan mound site on the Red River in northwestern Louisiana, in that the latter were large rectangular tombs with multiple interments with grave goods placed along the walls and in the corners of each tomb.



Offerings in the Boxed Springs burial tomb included 55 arrow points (Alba, Hayes, and Catahoula-like) in four clusters. There were also two large Gahagan bifaces, five celts, and polishing stones in the tomb. Additional grave goods included seven ceramic vessels: two plain bottles; a Spiro Engraved beaker; an everted rim jar with a pinched body decoration and zoned incised-cane punctates; a plain carinated bowl; and two plain jars. Ceramic vessels and sherds from other excavations and the looted cemetery include examples of Holly and Hickory Fine Engraved, Spiro Engraved, Coles Creek Incised, Weches Fingernail Impressed, Kiam Incised, East Incised, Crenshaw Fluted, and Crockett Curvilinear Incised.

Holmes Site (41SM282)

There is one known example in Smith County of a site with Lower Mississippi Valley ceramics such as Coles Creek Incised but with no Caddo ceramics. These sherds (from the J. A. Walters collection) are from the Holmes site on Simpson Creek in eastern Smith County. Simpson Creek drains to the north to the Sabine River, and the site is located near the headwaters of Simpson Creek in a wide valley where several small streams come together to form Simpson Creek. Dee Ann Story and Robert Mallouf recorded a possible mound (41SM62) in this vicinity in 1978.

The first sherd is a jar rim with a suspension hole (Figure 2a). The rim is direct and has a rounded lip; its orifice diameter is 20.0 cm. The sherd is from a vessel that was fired in a reduced atmosphere and it had grog temper. It is classified as Coles Creek Incised, var. Coles Creek, with horizontal incised lines that are slightly overhanging and smoothed. A row of triangular punctates have been placed below the horizontal lines. The sherd was submitted a few years ago for instrumental neutron activation analysis and the results indicated the vessel was made from local clays. The next sherd (Figure 2b) is from the same vessel. There is another example of Coles Creek, var. Coles Creek from the site that is a body sherd (Figure 2d).

Two sherds are decorated with randomly or freely-placed v-shaped tool punctates. One sherd is a rim, slightly everted, with a rounded lip (see Figure 2e). It comes from a vessel fired in a reduced atmosphere; charred plant materials were the only temper. Decoration on the sherd consists of randomly or freely-placed v-shaped tool punctates. The other v-shaped punctated sherd is a body sherd from a vessel fired in a reduced atmosphere. It has been tempered with grog and small, finely crushed bone; the sherd also has a sandy paste with visible quartz grains. The sherd is also decorated with v-shaped random tool punctates defined by a single straight incised line (see Figure 2f).

The last sherd is a body sherd with grog temper. The sherd came from a vessel that had been fired in a reduced atmosphere. The decoration on the sherd is similar to Marksville Stamped, var. Troyville with dentate rocker stamping (see Figure 2c).



Figure 2. Lower Mississippi Valley sherds from the Holmes site (41SM282): a-b, d, Coles Creek Incised, *var. Coles Creek*; c, Marksville Stamped, *var. Troyville*; e-f, v-shaped random tool punctated.

Henry Chapman site (41SM56) on Prairie Creek

The Henry Chapman site (41SM56) has examples of Early Caddo pottery (see Walters, this volume). Holly Fine Engraved and Hickory Fine Engraved wares are common in the ceramic assemblage, although few examples are as well executed as the examples from the George C. Davis site. Whether this means that the Smith County sites date later in time or were just poor copies of the vessels that were being produced at the Davis site is not known. Other examples of Early Caddo ceramic types present at the Henry Chapman site are Crockett Curvilinear Incised, Davis Incised, and Pennington Punctated-Incised; Weches Fingernail Impressed, found on many Early Caddo sites, is absent.

REFERENCES CITED

Perttula, Timothy K. and Bo Nelson

2004 Woodland and Caddo Archeology at the Broadway or Kanduts'ah Kuhnihdahahdisa' Site (41SM273) on the City of Tyler-Lake Palestine WTP Project, Smith County, Texas. Report of Investigations No. 50. Archeological & Environmental Consultants, LLC, Austin. Perttula, Timothy K. and Diane E. Wilson, with contributions by Mark Walters

2000 An Early Caddoan Period Cremation from the Boxed Springs Mound Site (41UR30) in Upshur County, Texas, and a Report on Previous Archaeological Investigations. *Journal of Northeast Texas Archaeology* 12:31-71.

Schambach, Frank F.

1970 Pre-Caddoan Cultures in the Trans-Mississippi South: A Beginning Sequence. Ph.D. Dissertation, Department of Anthropology, Harvard University.

Story, Dee Ann

1990 Cultural History of the Native Americans. In *The Archeology and Bioarcheology of the Gulf Coastal Plain*, by Dee Ann Story, Janice A. Guy, Barbara A. Burnett, Martha D. Freeman, Jerome C. Rose, D. Gentry Steele, Ben W. Olive, and Karl J. Reinhard, pp. 163-366. 2 Vols. Research Series No. 38. Arkansas Archeological Survey, Fayetteville.

Suhm, Dee Ann and Alex D. Krieger

1954 An Introductory Handbook of Texas Archeology. *Bulletin of the Texas Archeological Society* 25:1-562.

Walters, Mark

2008 Life on Jackson Creek, Smith County, Texas: Archeological Investigations of a 14th Century Caddo Domicile at the Leaning Rock Site (41SM325). Caddo Archeology Journal 17:1-114.

- 2009 Prehistoric Ceramics from the Browning Site (41SM195A). Journal of Northeast Texas Archaeology 29:1-7.
- Walters, Mark, with contributions by Phil Dering, Timothy K. Perttula, LeeAnna Schniebs, Marilyn B. Shoberg, and
- 2004 41SM195A, The Browning Site. Journal of Northeast Texas Archaeology 20:1-42.

East Texas Caddo Research Group, Part Two, Caddo Historic Archaeology

Ceramic Comparisons Between Certain Historic Caddo Sites in Nacogdoches County, Texas: Henry M. (41NA60), Spradley (41NA206), and Deshazo (41NA27)

Timothy K. Perttula

The Henry M., Deshazo, and Spradley sites are three of the better and recently studied Historic Caddo ceramic assemblages in East Texas (see Middlebrook and Perttula 2008; Perttula et al. 2009; Fields 1995). All three are in Nacogdoches County (see Middlebrook 2007:Figure 1), Henry M. and Deshazo on Bayou Loco, and Spradley on Lanana Creek.

How do these sites compare with respect to the decorative classes present in the utility wares and fine wares? All three sites are dominated by brushed utility wares (Table 1). At Spradley, brushed pottery comprises 53.4% of the decorated sherds compared to 72.7-85.6% of the decorated sherds from Henry M. and Deshazo. Incised, punctated, and incised-punctated decorative classes, however, are also abundant in the Spradley ceramic assemblage (30.8%), but much rarer in the Henry M. and Deshazo utility wares.

Fine wares—especially Patton Engraved comprise between 13.8% and 15% of the decorated sherds at the Spradley and Henry M. sites (see Table 1), suggesting that fine wares were equally available at both of these Historic Caddo sites. The exact proportion of engraved sherds cannot be determined at the Deshazo site because engraved and incised sherds were not quantified separately in the analysis by Fields (1995); nevertheless, Patton Engraved is the principal fine ware at the site. Based on the proportions of decorative classes in Table 1, engraved sherds can constitute no more than 13.7% of the Deshazo decorated sherds, but this proportion is likely much less than that amount (recent reanalysis by Shawn Marceaux of the Deshazo site decorated sherds will clarify the matter).

Henry M. and Deshazo ceramics are primarily grog-tempered (83-90.4%) (Table 2). Bone-tempered pottery, conversely, is much more abundant at the Spradley site, suggesting the existence of a different tradition of ceramic manufacture there when

compared to the wide-spread use of grog temper at the two Bayou Loco sites.

We can extend the ceramic comparisons to a broader part of Nacogdoches County (Table 3), employing several categories of decoration proposed by Middlebrook (2007:Table 1) as a means to differentiate contemporaneous ceramic assemblages, and also perhaps to distinguish different Caddo groups and communities living in the area. In Table 3, I use selected assemblages with more than 196 total sherds, and list them by drainage.

An inspection of Table 3 indicates the following:

The closest ceramic comparisons between the Henry M. site and the other known Nacogdoches County historic Caddo sites is with the Deshazo site (41NA27);

Bayou Loco and Angelina River sites are dominated by brushed utility wares. In the case of the Bayou Loco sites, they can be divided into two groups based on the relative proportion of brushed wares, one group with proportions ranging from 43-48.7% and the other with proportions between 59.8-69.4% (see Table 3); and

the Lanana Creek Caddo sites, Legg Creek sites, and Attoyac Bayou sites are part of a different local ceramic tradition, where brushed pottery is much less important, particularly in Caddo sites on Attoyac Bayou and Lanana Creek (see Table 3).

Table 3 makes clear that there are distinct spatial groupings of Allen phase sites in Nacogdoches County. Table 4 reshuffles the sites to regroup them by proportional similarity in the percentages and ratios expressed in the same ceramic attributes em-

Table 1. Decorative classes in the utility ware and fine ware ceramics.

Decoration	Spradley	Henry M.	Deshazo	
Utility Wares				
Brushed	50.0+	<u>72.3</u>	<u>85.6</u>	
Brushed-incised	<u>2.7</u>	0.3	*	
Brushed-appliqued	0.5	Trace	*	
Brushed-punctated	0.2	0.1	*	
Grooved	0.2	<u>2.4</u>	Trace	
Neck banded	_	0.1	Trace	
Ridged	0.1	_	_	
Appliqued	0.2	Trace	0.5	
Incised	<u>14.5</u>	5.2	*	
Punctated	<u>15.4</u>	1.7	0.2	
Incised-punctated	0.9	0.3	_	
Pinched	0.1	_	_	
Lip notched	0.1	-	-	
Fine wares				
Engraved	15.0	13.0	*	
Engraved-brushed	-	0.8	*	
No. of decorated sherds	1499**	2132	23,651	

^{*}present, but not quantified in Fields (1995); **robust sample from the site; + = percentage

Table 2. Temper comparisons between the three Historic Caddo sites.

Temper	Spradley	Henry M.	Deshazo
bone-tempered	40.3%	9.2%	17.0%
shell-tempered grog-tempered	0.9% 58.8%	0.4% 90.4%	- <u>83%</u>

ployed in Table 3, irrespective of stream drainage, leading to the recognition of five groupings: Group I on Lanana Creek, Group II on the lower Bayou Loco, Group III on the upper part of Bayou Loco and other streams draining into the Angelina River, Group IV sites on Bayou Loco and Legg Creek, and a single site near the confluence of Attoyac Bayou and the Angelina River (Figure 1).

What do these ceramic groups represent other than generally contemporaneous historic sites occupied by Caddo peoples. I suggest they represent different but clearly related social groups or communities of Caddo peoples living in the Angelina River basin (Corbin 2007; Perttula 2007:78). These groups may be refined, revised, or rejected with further analyses of the decorative elements and motifs present in the utility wares and fine wares.

REFERENCES CITED

Corbin, J. E.

2007 Cultural Diversity in the Southern Caddo Region. Journal of Northeast Texas Archaeology 26:11-23.

Fields, R. C.

1995 Analysis of Native-Made Ceramics. In *The Deshazo Site, Nacogdoches County, Texas, Volume 2: Artifacts of Native Manufacture*, edited by D. A. Story, pp. 173-232. Studies in Archeology 21. Texas Archeological Research Laboratory, The University of Texas at Austin.

Middlebrook, T.

2007 A Survey of Historic Caddo Sites in Nacogdoches County. Journal of Northeast Texas Archaeology

Table 3. Ceramic Comparisons with selected other Historic Caddo sites in Nacogdoches County, Texas.

Site*	% Brushed**	Brushed/Plain	% Brushed/Brushed + Plain
Lanana Creek sites			
41NA206	26.6	0.50	33.4
41NA223	18.1	0.32	24.2
Angelina River sites and	l Bayou Loco		
41NA6	65.1	4.61	82.2
41NA15	54.0	4.29	81.1
41NA54	70.2	3.8	79.0
Bayou Loco sites			
41NA21	46.2	1.21	54.7
41NA22	48.7	1.34	57.3
41NA23	43.0	1.15	53.5
41NA27	66.1	2.9	74.3
41NA60	59.8	2.8	73.8
41NA111	69.4	5.44	84.5
Legg Creek			
41NA44	34.1	1.07	51.8
Attoyac Bayou			
41NA67	7.2	0.12	10.7

^{*}Except for 41NA223, the sherd data from the other listed sites is from Middlebrook (2007: Table 1). **% Brushed is the percentage of all sherds with brushing as the only surface treatment; Brushed/Plain is the ratio of brushed sherds to plain or undecorated sherds; and % Brushed/Brushed + Plain is the percentage of the sherds with brushing compared to all the sherds in a collection that do not have "more elaborate decorative styles such as incised, engraved, or punctated" (Middlebrook 2007:101).

26:99-115.

Middlebrook, T. and T. K. Perttula

2008 Archaeological Investigations at the Henry M. Site (41NA60): An Early Historic Caddo Farmstead in Nacogdoches County, Texas. Journal of Northeast Texas Archaeology 28:13-20.

Perttula, T. K.

2007 One Attempt at Defining Allen Phase Ceramic Subclusters. Journal of Northeast Texas Archaeology 26:77-81.

Perttula, T. K., L. L. Bush, L. Schniebs, T. Middlebrook, and P. S. Marceaux

2009 An Early Historic Caddo Farmstead at the Henry M. Site (41NA60) in Nacogdoches County, Texas. MS in preparation.

Table 4. Groups I-V of Historic Caddo Ceramic Assemblages.

Site*	% Brushed**	Brushed/Plain	% Brushed/Brushed + Plain
Group I: Lanana Creek	sites		
41NA206	26.6	0.50	33.4
41NA223	18.1	0.32	24.2
Group II: Bayou Loco			
41NA60	59.8	2.8	73.8
41NA27	66.1	2.9	74.3
Group III: Angelina Rive	er and Bayou Loco		
41NA15	54.0	4.29	81.1
41NA6	65.1	4.61	82.2
41NA111	69.4	5.44	84.5
41NA54	70.2	3.8	79.0
Group IV: Bayou Loco si	ites and Legg Creek		
41NA44	34.1	1.07	51.8
41NA21	46.2	1.21	54.7
41NA22	48.7	1.34	57.3
41NA23	43.0	1.15	53.5
Group V: Attoyac Bayou			
41NA67	7.2	0.12	10.7

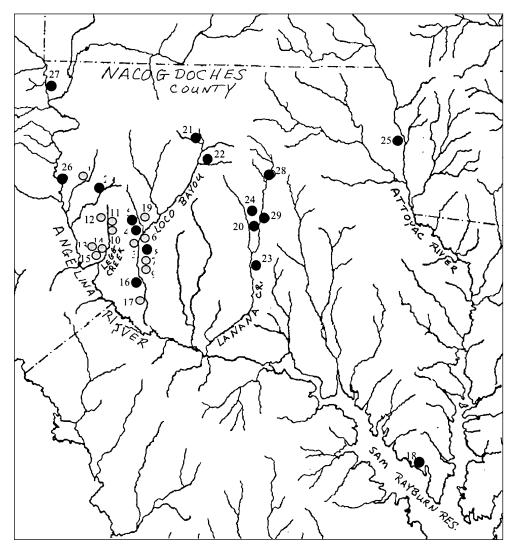


Figure 1. Location of Group I to Group V Historic Caddo ceramic assemblages in Nacogdoches County (after Middlebrook 2007:Figure 1). Black circles = location of Historic Caddo sites; Gray circles = location of possible Historic Caddo sites.

2. NA King3. NA184. NA21 Mayhew5. NA22 Iron Rock6. NA23 Loco Bottom	9. NA29 Perkins 10. NA33 11. NA44 Chaya 12. NA47 13. N53 14. NA Cecil Sparks 15. NA55	 17. NA65 18. NA67 19. NA I I I Dick Shipp 20. NA 113 21. NA187 Loco Fork 22. NA202 Stevens 23. NA206 Steve Spradley 	25. Joe Little26. AL Self27. WT Williamson28. Appleby Bead29. Nac. East Bead
	15. NA55 16. NA60 Henry M	23. NA206 Steve Spradley24. NA223 Guadalupe Pilar	