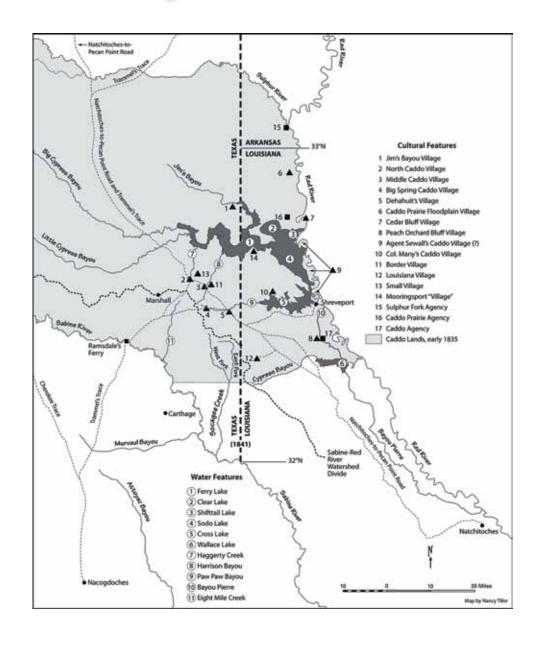
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A CASE FOR DEHAHUIT'S VILLAGE PART I¹

Jim Tiller

Introduction

During the late 1700s, the Kadohadacho (hereafter Caddo), a peaceful tribe of agriculturists and hunters, weakened by near-constant pressure from the more war-like Osage and the ravages of various epidemics, began to migrate from their traditional homeland near the Great Bend of the Red River south into northwestern Louisiana and adjacent East Texas. By the time of the Louisiana Purchase in 1803, the Caddo villages under their *caddi* Dehahuit were concentrated in the Sodo Lakes region west and northwest of modern-day Shreveport. Much of what we know today about the location of these settlements, and specifically Dehahuit's village, are found in the writings of Indian agents and the field notes and plat maps of period surveyors. In this article we will examine these and other relevant documents and present a case for the location of the village of this historic figure.

It is the contention of the author, based on material to be presented in the pages to follow, that Dehahuit's village will ultimately be found to lie northwest of Waskom, Texas on the southern terraces of Paw Paw Bayou beneath the neatly manicured lawns of the Victoria Wood subdivision. The site is depicted on the 1838 American surveys of northwestern Louisiana as lying on the Natchitoches-to-Pecan Point Road on the section line between Sections 2 and 3 of T17N, R17W. In support of this argument, we will examine in this article (1) a relatively definitive 1840 statement regarding the location of Dehahuit's village by Jehiel Brooks, long-time Caddo Agent and the individual who engineered the sale of the Caddo lands to the United States; (2) the well-known 1805 statement of Red River Agent John Sibley in which he noted that the Caddo lived some 35 miles west of the Red River on a bayou "called, by them, Sodo;" and (3) a memorial statement by the Caddo themselves regarding the re-location of some of their villages as required by Article 4 of the 1835 treaty cession.

Known Caddo Village Sites

Much of the literature of the last 25 years has implied that most, if not all, of the late 1700-early 1800s Caddo settlements were located north of Caddo Lake. In recent years, writers have typically suggested that the Caddo occupied but a single village located just inside Texas on Jim's Bayou. In fact, by the early 1800s, the Caddo may have occupied as many as 30 settlements within the Red River region. Although the location of most of these sites is lost to history, the great majority of those currently known, including the village of Dehahuit, are located south of the Sodo Lakes complex.

The archival record indicates that at one time or another at least 14 late 1700-early 1800s settlements were occupied by elements of the Caddo tribe in the Sodo Lakes region (Figure 1).⁴ In addition to the Jim's Bayou site,⁵ the North Caddo,⁶ Middle Caddo,⁷ Big Spring Caddo,⁸ Dehahuit's,⁹ Caddo Prairie Floodplain,¹⁰ Cedar Bluff,¹¹ Peach Orchard Bluff,¹² Agent Sewall's Caddo¹³ and Col. Many's Caddo¹⁴ villages are either actually named in period materials or their presence can be inferred from the historical record as one-time Caddo settlements. While not designated by name in period documents, the Border¹⁵ and Louisiana¹⁶ villages

are almost surely Caddo. The Small village¹⁷ site mentioned in a Republic of Texas survey is very likely Caddo. A Mexican survey sketch map of the Mooringsport "village"¹⁸ is drawn in such a manner as to make it difficult to determine whether what is depicted in the middle of a substantial prairie is an Indian settlement (maybe) or a pine hill (probably).

While there were doubtless a great number of small temporary encampments and possibly even some additional yet-to-be-located permanent settlements that may have been Caddo, the presently known sites probably represent the more prominent Caddo villages in the region in the late 1820s and 1830s. It should be noted that both American and Republic of Texas surveyors were active across the area during the late 1830s and early 1840s. The American surveyors carefully catalogued period roads, trails, paths, Indian villages and Anglo improvements (and even the path of a tornado) as they made their way, mile by mile, across individual townships. Early Texas surveyors, especially those marking out first and second class headright land in early 1838, while including many of the same items on their survey sketch maps, often used nearby Indian villages as landmarks in the general reference section of their field notes. As a result of their survey work, it is doubtful any substantial village escaped notice.

By far the most historically significant Caddo settlement in the region was the village of the great *caddi*, Dehahuit. This was the village referred to in the journals of the Freeman and Custis expedition,²⁰ and it was in this village that Spanish soldiers cut down an American flag in 1806 causing a minor diplomatic incident.²¹ Since we know Dehahuit lived in the same village from the early 1800s up to the date of his death in 1833,²² it is a virtual certainty that one of the known sites is associated with this individual.

Jehiel Brooks' 1840 Comment on the Location of Dehahuit's Village

On January 30, 1840, Jehiel Brooks answered the memorial of Samuel Norris in the matter of the Grappe land claim.²³ Within this filing, Brooks, who devoted an entire paragraph to defining the location of the village of Dehahuit, noted that

The Indian south boundary as expressed in the treaty made by your respondent he believes cannot be questioned with any greater propriety. The Head Chief of the Caddo nation named Dehahuit or Dehahut resided at what has always been known by the name of "the Key Village" from the time of the first council ever held by this Government with that functionary in May 1805 to the time of his death in March 1833 which village is situated within a short distance of said Boundary and about ninety miles from the town of Natchitoches.²⁴

This statement, by an individual who travelled extensively within the Caddo nation and who doubtless knew Dehahuit well, is the single most authoritative statement available on the matter of the location of Dehahuit's village. When combined with other more circumstantial evidence, Brooks' comment leaves little doubt that this site was located west of Cross Lake on Paw Paw Bayou (see Figure 1).

Brooks indicated Dehahuit's village was situated near the south boundary of the Caddo lands conveyed to the United States. We know that the southern treaty boundary extended from the Red River to the Mexican line via Pascagoula Bayou, Bayou Pierre, Bayou Wallace, Wallace Lake and Cypress Bayou. American surveyors found only one Indian settlement in the *immediate* vicinity of the Caddo south boundary – the Louisiana village.

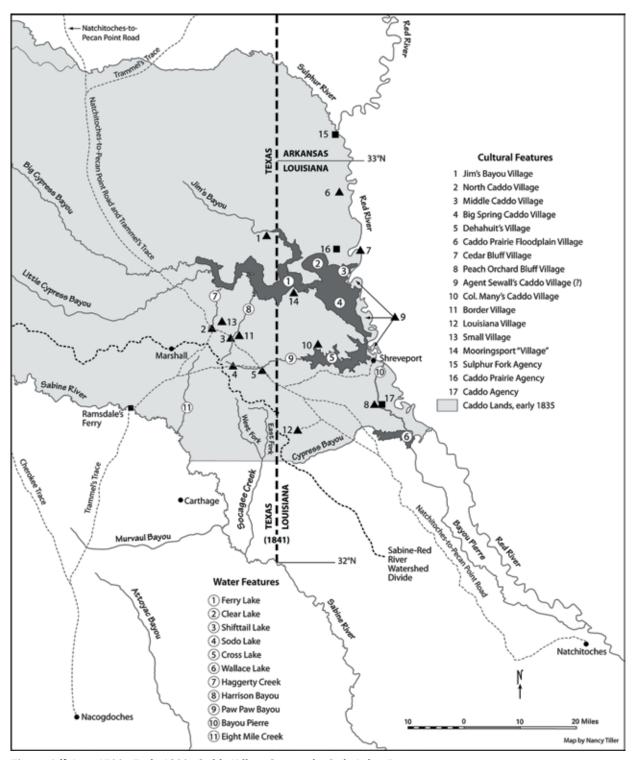


Figure 1.60 Late 1700s-Early 1800s Caddo Village Sites in the Sodo Lakes Region.

The question, of course, is what did Brooks mean when he said the "village is situated within a short distance of said Boundary?" Fortunately, he clarified the statement when he noted that the settlement was located "about ninety miles from the town of Natchitoches." The primary road running northwest out of Natchitoches into Caddo country, the Natchitoches-to-Pecan Point Road, is clearly delineated on the 1837-1838 American survey plat maps of northwestern Louisiana.²⁷ The distance between Natchitoches and the Louisiana village, as depicted on these maps, is approximately 75 miles. While it might be tempting, based on proximity to the southern Caddo boundary, to suggest that this village was the home of Dehahuit, considered in the full context of this article, the best case suggests that Brooks was in fact *not* referring to the Louisiana village in his statement.

Dehahuit's village on Paw Paw Bayou is approximately 87 miles from the town of Natchitoches via the old Natchitoches-to-Pecan Point Road. The definition of "within a short distance" can be debated endlessly, but the 90-mile distance referred to by Brooks is much more precise and meaningful. The only question is just how accurate was Brooks' estimate of the distance? While caution should certainly be exercised when working with period estimates of distances, in fact, such calculations are often found to be surprisingly accurate considering the means of measurement employed. Many distances described in archival materials are based on estimates of the mileage covered by horse (or an individual walking) within a given time period. During his stint as Caddo Agent, Brooks doubtless used this method frequently in his travels around the Caddo nation and to Natchitoches. Too, by the time Brooks submitted his answer to Norris' memorial in 1840, the American surveys had been completed in this section of Louisiana providing yet another corroboration of distances between known points (Figure 2). It is doubtful Brooks was far off in his estimate of 90 miles.

Brooks' statement is the centerpiece of the case for Dehahuit's village being situated on Paw Paw Bayou near the western end of Cross Lake. While some, especially those wedded to the Jim's Bayou as Timber Hill/Dehahuit's village theory, might suggest that Brooks was implying a straight-line distance from Natchitoches to the village, such a method of calculating distances frequently travelled seems highly improbable considering the means of transportation available in Brooks' time. Who among us, when asked for or stating the distance between our hometown and a nearby large city visited on occasion, would answer in straight-line miles? Time, possibly, driving mileage probably, but hardly straight-line miles. Certainly Brooks' comments, when combined with material presented in the following paragraphs, offer, pending a formal archeological effort, the single most important piece of circumstantial evidence for Dehahuit's village being northwest of present-day Waskom.

The 1805 Statement of John Sibley

In his April 1805 "Historical Sketches," Red River Agent John Sibley noted that the Caddo

Live about thirty-five miles west of the main branch of Red river, on a bayou or creek, called, by them, Sodo, which is navigable for pirogues only, within about six miles of their village, and that only in the rainy season.²⁸

It is this quote, one that has been so misinterpreted by modern writers, that has largely given rise to the myth of the Jim's Bayou site as the home of Dehahuit. In this section, we will begin by noting the distance from the Red River of the three most probable Dehahuit village candidates. Dehahuit's village on Paw Paw Bayou lies some 24 miles west of the Red River. By comparison, the Louisiana village is situated approximately 18 miles west of the Red; the Jim's Bayou site lies some 24 miles west of the river.

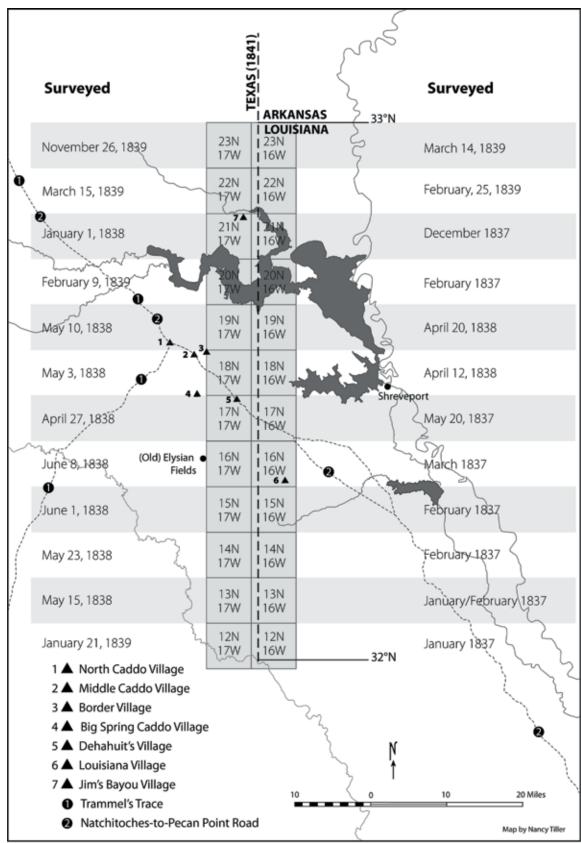


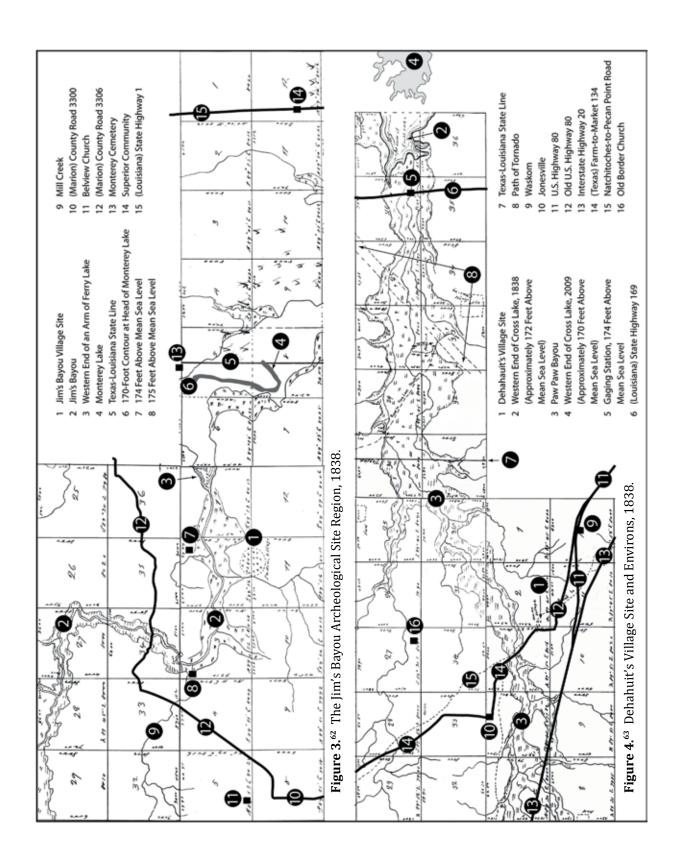
Figure 2.61 Survey Dates for R16W and R17W.

While the distances from the Red River are significant, and could possibly cause one to give some consideration to the Jim's Bayou site, perhaps of even greater importance is Sibley's statement as regards the Caddo living on a "bayou or creek, called, by them, Sodo, which is navigable for pirogues only, within about six miles of their village, and that only in the rainy season." It appears to the author that most Caddo scholars who have addressed this topic have failed to consider the fact that the Sodo Lakes complex had been formed less than five years (spring 1800) when Sibley wrote his "Sketches." Who among us has not had the occasion to observe the process of sedimentation across open ground reduce a one or two-acre farm pond in East Texas by 10 or 15 percent within a few short decades? For ponds fed by permanent streams with their higher sediment loads, the rate of infill is considerably more rapid. As Sibley penned his words in April 1805, the sedimentation process was just getting underway along Jim's and Paw Paw Bayous. By the time the American surveyors drew their plat maps in the late 1830s, sedimentation at the upper end of the respective lakes had doubtless created significant changes from the scene Sibley described.

The average level of Ferry (Caddo) Lake in 1838 (and very likely in 1805 as well) is estimated by Bagur to have been approximately two feet higher than today's 168.5 feet maintained by the presence of a dam on Big Cypress Bayou.²⁹ The western end of the Jim's Bayou arm of Ferry Lake depicted on the 1838 plat map (Figure 3) is located approximately one-half mile west of the 170-foot contour which crosses Jim's Bayou at the upper end of Monterey Lake. Such a location very closely approximates Bagur's average pre-dam lake level of 170.5 feet. Note also on Figure 3, the presence of the 174-foot elevation marker on the north side of Jim's Bayou approximately three miles west of the state line – a point almost directly across the bayou from the village site. To extrapolate, the water level shown on the 1838 plat map, which as depicted is about one-sixth of the way between the upper end of Monterey Lake (170 feet) and the 174-foot elevation north of the village site, is very close to the average lake level of 170.5 feet during the pre-dam period. With the 1838 plat as a guide, and assuming 30 years of sedimentation, it is more than reasonable to suggest that at the time Sibley wrote his "Historical Sketches" in 1805, Jim's Bayou and its floodplain was somewhat lower than that shown on the 1838 survey map, hence the arm of Ferry Lake depicted doubtless extended upstream (westward) a greater distance.

Note how the American surveyor illustrated the Jim's Bayou floodplain on the 1838 plat map, especially the area north of and upstream from the village site (the swampy land). The map suggests a stream valley that is being silted – as would be expected if a lake had been formed downstream in the recent past. The creation of the Sodo Lakes complex would have had the effect of further reducing the already relatively low gradient of Jim's Bayou causing the stream to deposit a portion of its load along its adjacent floodplain, and especially at the point where the bayou entered the still waters of the lake. Over time, this would have raised the height of the floodplain as well as the stream itself and caused the lake to recede downstream (in much the same manner a pond gets smaller over time).

Today, the 175-foot contour (which was almost surely under water during the rainy season prior to 30 years of silting) crosses Jim's Bayou just south of the point at which Mill Creek enters the larger stream, some 1.5 miles upstream from the Jim's Bayou village site. In all probability, as sedimentation was in its earliest stages at the beginning of the 1800s, the stream and associated valley (lying to the north of the Jim's Bayou archeological site) was filled by a substantial lake that was perhaps as much as one-half mile across. The presence of such a lake adjacent to the village would not have been compatible with the description provided by Sibley in his "Historical Sketches."



The same general conditions would have existed at the head of Cross Lake in the early 1800s. Doubtless this lake also extended upstream a greater distance than is the case today. If we assume the lake levels of both Ferry/Caddo and Cross Lakes to have averaged approximately the same height above mean sea level (170 feet), then it appears that, because of the steeper stream gradient of Paw Paw Bayou, the western shore of Cross Lake in the early 1800s was probably less than one mile west of its current location (Figure 4). Interestingly, flood stage on Cross Lake today typically approaches 175 feet above mean sea level³⁰ – the 175-foot contour being almost exactly six miles east of the Dehahuit village site.

The Louisiana village is located on the south branch of Boggy Bayou, a stream which joins Cypress Bayou just before entering Wallace Lake. The village site is more than 8 miles from the 170-foot contour – thus placing it far to the west of any substantial lake known to have existed in the area in the early 1800s. Too, it should be noted that the pioneer northwest Louisiana Wallace family, some of whom lived on the southern shore of this lake, would have been well-known to Sibley in 1805.³¹ It is highly unlikely he would have so misjudged the lake upon which this family lived and its distance from the Louisiana village. If the Brooks and Sibley comments do not remove the Louisiana village from contention as the home of Dehahuit, then, as we will take up in the following section, the 1837 Caddo memorial on the matter of village re-location ought to.

In summary, in 1805 the Jim's Bayou village was probably situated on a lake – but certainly not on a creek "navigable for pirogues only, within about six miles of their village, and that only in the rainy season." By comparison, Dehahuit's village site would have been found on a creek some six miles west of the western shore of Cross Lake. On balance, Sibley's description in terms of both distance from the Red River as well as the relationship of the village to the lake via the adjacent creek certainly applies much more closely to the Paw Paw site than to either the Jim's Bayou or Louisiana villages.

The January 6, 1837 Caddo Memorial to the Secretary of War on the Matter of John G. Green

Sibley, in his "Historical Sketches," provided a name for the watercourse upon which the primary Caddo village was located – Sodo. Caddo scholars are aware that the period literature is filled with references to (and maps of) Sodo Lake – a southeast to northwest trending lake that once lay between modern-day Shreveport and Caddo Lake, parallel to and including the channel of Twelvemile Bayou (see Figure 1). Certainly it would seem reasonable to suggest that Sibley's Sodo Bayou must have fed into this lake. Since the primary watercourse entering old Sodo Lake was Big Cypress Bayou, it would be logical to assume Dehahuit's village, once located, would be found to lie within the Big Cypress watershed. With the discovery of the Jim's Bayou site, it was a short leap to associate this village with the great *caddi* Dehahuit.

Based upon the totality of the material presented within this article, it seems clear that such an assumption was in error. We know from Brooks that Dehahuit probably lived near the western end of Cross Lake from at least as early as 1805 until his death in 1833. Sibley's description of the relationship between the stream upon which the Caddo village was located and a nearby lake almost surely removes the Jim Bayou site from contention as the settlement described. Was Sibley wrong in noting that the primary Caddo village was located on a creek by the name of Sodo, or could it be that later writers, at least according to Caddo tradition, have re-named one of the lakes? It appears from the record that the lakes identified as Sodo by the Americans and the Caddo were *not* one in the same.

Except for Sibley's comment noting that the Caddo lived "on a bayou or creek, *called, by them, Sodo*" [author's emphasis], there is only one other instance that the author is aware of where the Caddo themselves make reference to a water body called Sodo. In a January 9, 1837 memorial to the Secretary of War, the chiefs and head men of the Caddo nation protested the naming of any individual to serve as their attorney-in-fact, or to act for them, in the matter of their 1837 annuity other than John G. Green. Near the bottom of the memorial is found the following paragraph, apparently inserted by the Caddo to note their compliance with the 1835 treaty article that required them to remove from the bounds of the United States within one year.

We have established our villages near the head of Lake Sodo, which we believe to be without the boundary of the United States, but on running the line between Mexico and the United States, should it be found to be within the jurisdiction of the latter, we will instantly remove further to the West. Hope you will inform the president of our great wish, to have this line run out, as we can make no permanent settlement until this is done.³²

In the following paragraphs we will discuss this passage in terms of three items: (1) What did the Caddo believe their western boundary to be; (2) Is there any evidence of "new" Caddo villages near the head of Lake Sodo; (3) What did the Caddo mean by Lake Sodo?

Larkin Edwards

To begin, the interpreter for this 1837 memorial was Larkin Edwards, Sr. This individual was well-known to the Caddo; they having dealt with him many, many years prior to the date of the memorial. The Caddo undoubtedly had the highest respect for Edwards, and apparently had always found him an honest man – and one who worked in their best interests. So great were their feelings for Edwards that they gave him a 640-acre reservation in the 1835 treaty to be located at a place of his choosing within the confines of their lands ceded to the United States (he chose a site that later became Shreveport).³³ It seems entirely reasonable to assume that such a relationship would have resulted in a highly accurate, and possibly even a word for word, translation of the wishes of the Caddo.

The Caddo View of the Western Boundary of their Cession

The memorial tells us that the Caddo had recently moved their villages westward from areas they believed to have been within the bounds of Louisiana. The question is, what did they believe to be the western boundary of their cession to the United States? The answer can be found in several depositions taken in the matter of the Grappe claim. A number of individuals testified to the fact that the Caddo believed their boundary to have been Terán's Line. Consider

Sylvestre Poissoit, who swore that the Caddo told him

... that the country sold by them to Mr. Brooks was bounded by the line made by General Terán, and lay from where that line struck the "first red water"³⁴ to Cyprus bayou, and thence west ...³⁵

Joseph Valentin, who stated

that the Indians told him they had sold from the river Sabine along Terán's line to where it intercepts the first red water, and thence up. 36

Manuel Laffitte, who testified that

The Indians have told him what lands they sold by treaty in 1835, but not the quantity; they sold from Terán's line, where it touched Red river, out towards sunset.³⁷

While it is not possible to precisely establish the point at which Terán's Line passed through the region, its approximate location can be readily calculated from Aldrich's *Surveys between the Sabine and Red Rivers made for titles under Radford Berry, Commissioner*.³⁸ Based on this map and comments by Brooks which follow, it appears that Terán's Line passed through the last tier of sections in R15W (Figure 5).³⁹ Such a placement is confirmed by Brooks' summation to the jury in his District Court trial (*Brooks vs Norris*) in which he observed that in the fall of 1828 he met General Mier y Terán near the head of Cross Lake and was informed by him that he was in the area to informally establish the line between Mexico and the United States. Based on information Brooks later acquired from the Caddo regarding Terán's Line, he determined that the line

... passed close to the head of Cross Lake, leaving all the Indian villages on the Texas side of it ... [Brooks also observed that] it was generally known that his [Terán's] line was too far east of a due north course from Darby's corner as it was called to be thought correct.⁴⁰

Interestingly, Brooks also noted in his summation that a meeting

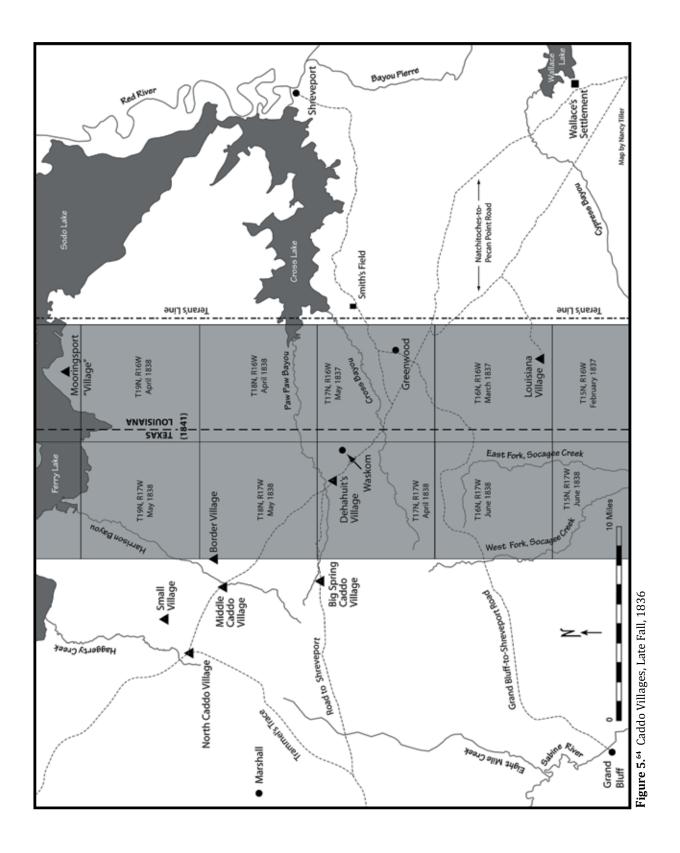
took place some sixteen miles west of Shreveport, which cannot be far from the Texas line: Texan's must have been near to, or a little east of Smyth's \dots ⁴¹

The meeting referred to was held in September 1837 at the home of Col. John Smith who lived south of Cross Lake and whose improvement was duly noted by the American surveyors. As a result of this meeting, the Caddo sent a memorial to the Senate of the United States stating that in the treaty of cession they had not reserved any land for the Grappes, and that Brooks had in effect committed a fraud upon the American government.⁴²

Finally, Brooks observed in his summation that

Cesair Laffitte testified that the Indians called himself and others to attend at Smyth's, in order to inform the Government that they had never made any reservations to the Grappes; and that having once been deceived by Brooks, they did not wish to be again. The meaning of this would be an enigma – a downright puzzle, were it not for their having lost their villages west of the Terán line.⁴³

It is important to keep in mind that by September 1837, the Americans had surveyed out all of R16W south of modern-day Caddo Lake (see Figure 2 for survey dates). This had resulted in the Caddo losing the Louisiana village. ⁴⁴ The Caddo were also doubtless aware at the time, as certainly the area settlers would have been, that the United States government had let contracts in April 1837 to survey R17W. ⁴⁵ Since two of their villages, one on Jim's Bayou and Dehahuit's village, were within two miles of the western boundary of R16W, there could be no question that once the surveying of R17W began, these two villages would be lost as well.



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Area Caddo Villages

From the text of the January 1837 memorial, it is clear that by the end of 1836 the Caddo had removed all of their villages from points east of Terán's Line and established one or more of what they considered to be temporary villages (until the final line could be run) to the west of that line near the head of Lake Sodo. While the Caddo were obligated by the 1835 treaty to leave the United States within one year,⁴⁶ they were not permitted to do so by American General Edmund P. Gaines due to difficulties in Texas associated with the Revolution.⁴⁷ It is likely this permission was granted once conditions had stabilized, and after the general had sent Major B. Riley into the Caddo villages for a report on activities there. Riley's August 21, 1836 report found the Caddo

... very peaceably disposed, and it is my opinion that they never were otherwise; and if they have committed some small depredations on the inhabitants, or their property, it was occasioned by the too free use of whiskey, which appears to be in great abundance in and about their villages.⁴⁸

The archival record does not reveal the precise date any of the known Caddo villages were established, however, the reader will note on Figure 1 that there are no Caddo villages near the head of Lake Sodo (as defined by the Americans) save possibly for the Mooringsport "village" – and there is nothing in the record to suggest a date for this "settlement," if it is even a village. In fact, there is no evidence that the author is aware of that suggests there was ever an Indian village in this area during the late 1700s-early 1800s period.

On the other hand, the record does suggest that the Big Spring Caddo village, lying some six miles west of Dehahuit's settlement, may have been established sometime during the fall of 1836. In April 1835, George Aldrich surveyed a number of parcels of land in the area of the village for Santos de Azco. No mention is made in these surveys of any Indian settlement, or of any human activity for that matter.⁴⁹ Nor does it appear that the village was in existence in August 1836 when Major B. Riley visited four area Caddo villages. In his report prepared for General Gaines, he noted that

The country is beautiful; and if there were springs, it would be one of the best parts of the country I have travelled through. They have to use bayou water for all purposes.⁵⁰

The Big Spring village was likely given its name by early Anglo settlers who were impressed with the presence of large springs in the area (several are still to be found even today). Major Riley visited four Caddo villages, probably the Louisiana, Dehahuit's, the Middle and North (or possibly the Border) villages. It seems doubtful that he would have made the statement above had he visited the Big Spring site. We know the village was occupied on February 22, 1838, when John S. "Rip" Ford surveyed what later became known the "Big Spring Caddo" tract for James Smith, assignee of Francisco Valmore. Ford noted that the survey included the "Big Spring Village." Later references typically included Caddo in the name.

Finally, let us consider the naming pattern of the string of known Caddo sites stretching from Trammel's Trace to Dehahuit's village. Prior to early 1835, probably due to its isolation and the activities of the Indian agents who attempted to keep settlers off Caddo lands, eastern Harrison County contained few whites. By 1836, the battle of San Jacinto, the creation of the new Republic of Texas, the clearing of the Great Raft to a point near Shreveport, and the sale of the Caddo lands to the United States, all combined to create conditions more favorable for settlement.⁵³ That said, even by early 1837 the region south of Caddo Lake and east of Trammel's Trace probably contained fewer than 100 families.⁵⁴

As immigrants began to trickle into the area, they encountered the Caddo. The early contacts appear to have been generally peaceful. In an early March 1837 petition from the region, there is not the slightest hint of an Indian problem, although the Caddo were certainly still occupying villages in eastern Harrison County. In going about their day-to-day lives, it is likely these early Anglo immigrants assigned names to the various Caddo villages. In fact, these were probably the very names noted by Republic of Texas surveyors in early 1838. The names given to these settlements probably even suggest the relative position of Caddo sites in the area. Hence the *named* North Caddo village, near the intersection of the Natchitoches-to-Pecan Point Road and Trammel's Trace, was likely the northern-most settlement in eastern Harrison County. As pointed out in Note 7, to the south of this village on the Natchitoches-to-Pecan Point Road lay the *named* Middle Caddo village.

While it is the belief of the author that early 1835-1836 settlers in the region knew Dehahuit's village as the South Caddo village, no supporting evidence for such a supposition can be offered. Surely, considering the presence of both a *named* North and Middle Caddo village, a settlement known as the South village once existed. (see email comments) Considering the location and long history of Dehahuit's village, it seems reasonable to suggest that this site is the missing southern settlement. Had it not been apparent in early 1838 that the American surveys of R17W would incorporate the village, it is very likely Texas surveyors would have noted the presence of a South Caddo village in the general reference section of their surveys in the area. That said, the name South Caddo village is not found in any archival record that the author is aware of. Although it is possible that the name may have appeared in an early deed or court filing, unfortunately the Shelby County courthouse burned in 1882 with the loss of all records (Harrison County was created from Shelby County in 1839).

As noted previously, the Big Spring Caddo village was probably created as a new settlement soon after General Gaines received Major Riley's report and gave his permission for the Caddo to begin their westward migration out of the United States. The fact this village had a non-directional *period* name strongly suggests that it was established at some point after initial Anglo settlement. It is not likely this new site would have taken the name South Caddo village since that name was probably already well established in the vernacular of the settlers.

The strength of the memorial paragraph lies in the fact that it was developed by the Caddo themselves and interpreted, presumably as they stated it, by an individual well-known, highly respected and trusted by them. In addition to suggesting a reason why there is no *named* South Caddo village, the memorial paragraph also provides a basis for establishing the age of the Big Spring village. Considering the proximity of the Big Spring village to the western boundary of R17W, it is very possible that this settlement was the location from which the Caddo came to Shreveport in the fall of 1838 never more to return to their homes in Texas.

Lake Sodo

Finally, what to make of period references to Lake Sodo? The 1837 memorial, combined with other material presented in this article, seems to suggest that the waterbodies known to the Caddo and Whites in the early 1800s as Sodo Creek/Bayou and Lake Sodo were *not* one in the same. It appears that Caddo references (Sibley's 1805 "Historical Sketches" comment and the 1837 memorial) to these entities were to what we know today as Paw Paw Bayou and Cross Lake. To the author's knowledge there is not a single post-Louisiana Purchase, non-Indian reference to a Sodo Creek/Bayou. White references to Sodo Lake are associated with the large lake lying northwest of Shreveport and running more or less parallel with the Red River, although the entire Sodo Lake-Ferry (Caddo) Lake complex at various times has been referred to as

Sodo Lake. White settlers appear to have called modern Cross Lake, Coss or Cass Lake, and the major stream entering its western end as Paw Paw Bayou (early references suggest the name of the bayou was Quapaw or Village Creek).

When the name Sodo was first applied to the lake *northwest* of Shreveport remains a mystery. The first American reference to Sodo Lake that the author is aware of is found in the May 1826 report of Captain George Birch to General Gaines. Birch had led an expedition up the Red River with the purpose of determining a possible route through the Great Raft. He indicated that he left the Red River and made his way to Coss Lake via Coss Bayou, and then moved north into what he called Lake Sheodo. The names of Coss (later Cass and ultimately Cross) and Sheodo (Sodo) Lakes were doubtless provided to Birch by his guide, a "Mr. Wallace, who has lived 50 years in the neighborhood." According to a 1840 deposition, Thomas Wallace, 57 years old at the time, had "... lived in the neighborhood of Rush island [the area between the old channel of the Red River and Bayou Pierre], or in Natchitoches parish, about forty years – about thirty-five years of the time, near Rush island ..." In this same deposition, Wallace stated that the Caddo "made their first settlement in this part of the country about four years before the [1803] treaty with France, by which Louisiana was acquired ... "59 If we assume Wallace provided Birch with the names for these water bodies *as known to him*, and that Sibley was correct that the Caddo called the bayou upon which they lived, Sodo (and that it was to the area west of this lake that the Caddo moved their villages in the fall of 1836), then the name applied to today's Cross Lake (and associated creek/bayou) in the early 1800s would depend upon who you were talking to.

Summary and Conclusions

The village of the great *caddi*, Dehahuit, has long been thought to have been located north of Caddo Lake – in recent years opinion has coalesced around the site south of Jim's Bayou in Marion County. It is the view of the author that the archival record does not support the contention that this site was the home village of Dehahuit. Based on a variety of period materials including court filings, reports and letters from Indian agents, Mexican and Republic of Texas surveys and a memorial from the Caddo themselves, it seems clear that Dehahuit's village was located south of Paw Paw Bayou on the old Natchitoches-to-Pecan Point Road on the section line between Sections 2 and 3 of northwest Louisiana's T17N, R17W – a site that would later be found to lie approximately 2.5 miles west of the current Texas-Louisiana line. The village, situated approximately 1.75 miles northwest of Waskom, probably straddles Farm-to-Market Road 134 near the entrance to the Victoria Wood housing addition.

Notes

- 1. The material in this article has been adapted from Tiller, Jr., James W. *Before the Line: A Geographical Analysis of Selected Period Records From the Caddo Lake-Sabine River Borderland of Texas, 1803-1841.* Vol. II. Caddo Indians: The Sodo Lakes Years (working manuscript).
- 2. See for instance, Bagur, Jacques. A History of Navigation on Cypress Bayou and the Lakes. Denton, TX: University of North Texas Press, 2001. pp. 30-39; Carter, Cecile Elkins. Caddo Indians: Where We Come From. Norman, OK: University of Oklahoma Press, 1995. pp. 214-217; Parsons, Mark L., James E. Bruseth, Jaques Bagur, S. Eileen Goldborer and Claude McCrocklin. Finding Sha'chahdinnih (Timber Hill): The Last Village of the Kadohadacho in the Caddo Homeland. Archeological Reports Series, No. 3. Austin, TX: Texas Historical Commission, 2002. pp. 5-14.

The Caddo site on Jim's Bayou is often represented in the literature as Timber Hill, the home of Dehahuit and the last Caddo village in their traditional northwest Louisiana and adjacent East Texas homeland.^{2.1} In fact, it was neither.^{2.2} There is no doubt the Jim's Bayou site was a very old and substantial settlement. This is probably the village depicted on Darby's 1816 Map of Louisiana,^{2.3} and may be the village near the Caddo Prairie Agency alluded to by Gray in 1824.^{2.4} The site is depicted on the 1838 plat map of northwest Louisiana's T21N, R17W (Sections 2 and 11).^{2.5}

- 2.1. A major source for much of the confusion regarding this site may be found in the recent work of Bagur (see his *A History of Navigation on the Cypress Bayou and the Lakes* [2001], and especially his material in *Finding Sha'chahdinnih (Timber Hill): The Last Village of the Kadohadacho in the Caddo Homeland* [2002], both cited above).
- 2.2. Tiller, Jim. Was Timber Hill the Last Caddo Village in the Caddo Homeland? *Caddo Archeology Journal*. Vol. 18 (2008). pp. 11-21. The author was in error in this article when suggesting that the name Timber Hill applied to the Jim's Bayou site.
- 2.3. A Map of the State of Louisiana with Part Of The Mississippi Territory, from Actual Survey By Wm. Darby. 1816. William Darby, surveyor. Philadelphia, PA: John Melish. The David Rumsey Map Collection (see URL, www.davidrumsey.com).
- 2.4. National Archives and Records Administration. *Letters Received by the Office of Indian Affairs,* 1824-1881, Red River Agency. M234, Roll 727. Letter from George Gray, Agent to Thomas McKinney, Superintendent of Indian Affairs, October 1, 1824.
- 2.5. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Map for T21N, R17W* (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).
- 3. Pichardo, Father José Antonio. Charles Wilson Hackett (editor). Pichardo's Treatise on the Limits of Louisiana and Texas: An Argumentative Historical Treatise with Reference to the Verification of the True Limits of the Provinces of Louisiana and Texas: Written by Father José Antonio Pichardo, of the Congregation of the Oratory of San Felipe Neri, to Disprove the Claim of the United States That Texas Was Included in the Louisiana Purchase of 1803. Vol. III. Austin, TX: The University of Texas Press, 1946. p. 422.
- 4. For purposes of identification, the author has assigned names to Caddo sites discussed in this article not documented in period records. Unless indicated as a *named* village in Notes 5-18 below, the site designations are those of the author and should not in any way be taken as a name found in period documents.

- 5. The Jim's Bayou village is *not* a named Caddo village in period documents. The site (41MR211) is located on Jim's Bayou in northeastern Marion County approximately two miles west of the Texas-Louisiana border.^{5.1} While there is no reference made to the village in early Republic of Texas surveys, the site is found on the 1838 American survey straddling the section line of Sections 2 and 11, T21N, R17W.^{5.2}
 - 5.1. Parsons, Mark L., James E. Bruseth, Jaques Bagur, S. Eileen Goldborer and Claude McCrocklin. *Finding Sha'chahdinnih (Timber Hill): The Last Village of the Kadohadacho in the Caddo Homeland.* Archeological Reports Series, No. 3. Austin, TX: Texas Historical Commission, 2002.
 - 5.2. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Map for T21N, R17W* (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).
- 6. The North Caddo village is a Caddo village *named* in period documents. The village site is located on Trammel's Trace near the intersection with the road from Shreveport via the Middle Caddo and Dehahuit's village.^{6.1}
 - 6.1. See Texas General Land Office. Shelby County. *First Class, File 000108, Josiah Prewitt*; Shelby County. *First Class, File 000090, R.O. Watkins*. Original Land Grant Collection, Archives and Records Division, Austin, Texas.
- 7. The Middle Caddo village is a Caddo village *named* in period documents. The village site is located on Harrison Bayou on the Shreveport-to-Trammel's Trace Road between the North Caddo and Dehahuit's village.^{7.1}
 - 7.1. See Texas General Land Office. Shelby County. *First Class, File 000152, Holland Anderson*; Shelby County. *First Class, File 000185, Seaborn Robinson*. Original Land Grant Collection, Archives and Records Division, Austin, Texas.
- 8. The Big Spring Caddo village is a *named* Caddo village in period documents. This village site is depicted in a general sense on an 1840 Texas General Land Office map.^{8,1} It is also referenced in a number of early Republic of Texas headright surveys.^{8,2} The village is mentioned by name in John S. "Rip" Ford's memoirs.^{8,3}
 - 8.1. Texas General Land Office. Map Collection. *Harrison County*. 1840. GLO Map Image 1515. Archives and Records Division, Austin, Texas.
 - 8.2. See for instance, Texas General Land Office. Harrison County. *Third Class, File 000184, Josiah Barrentine;* Shelby County. *First Class, File 000156, Lucinda Wallace;* Shelby County. *First Class, File 000174, Sarah Shoto;* Shelby County. *First Class, File 000278, James Cellums;* Shelby County. *First Class, File 000361, Sebastian C. Garner.* Original Land Grant Collection, Archives and Records Division, Austin, Texas.
 - 8.3. Ford, John Salmon. Stephen B. Oates (editor). *Rip Ford's Texas*. Austin, TX: The University of Texas Press, 1963. pp. 25-26.
- 9. Dehahuit's village is *not* a named Caddo village in period documents. It is depicted on the American survey plat on the section line between Sections 2 and 3, T17N, R17N. 9.1 This is almost surely the village mentioned in Bonnell's report of April 1836 9.2 as being located 12 miles from a second, more southerly, Caddo village (probably the Louisiana Caddo village, see Note 16).

- 9.1. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Map for T17N, R17W* (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).
- 9.2. 25th Cong. 2nd sess. *House Document 351*. pp. 774-775, 807.
- 10. The Caddo Prairie Floodplain village is *not* a named Caddo village in period documents. In his journal, trader Anthony Glass noted that upon leaving the Cedar Bluff site he travelled approximately seven miles across what we know today as the Caddo Prairie. During the journey, he "saw the remains of Caddo Huts and many Peach trees." Although the location of this site has not been established (it probably having long ago been either washed away or silted over by the meandering Red River), its general location is clearly depicted on Alban & Oliver's map entitled *Route to Surround Red River Raft*. 10.2
 - 10.1. Glass, Anthony. Dan L. Flores (editor). *Journal of an Indian Trader: Anthony Glass and the Texas Trading Frontier, 1790-1810*. Texas A&M Southwestern Studies, No. 4. College Station, TX: Texas A&M University Press, 1985. p. 41.
 - 10.2. Route to Surround Red River Raft by contractors Alban & Oliver (map). Under Act of the Legislature of the State of Louisiana to improve Red River Navigation, Approved September 8, 1869, With other data from the U.S. Historic Records. And engineering records of the War Department and the Louisiana Geological Survey. Archives and Special Collections, Noel Library, Louisiana State University, Shreveport. Shreveport, Louisiana.
- 11. The Cedar Bluff village is not a named Caddo village in period documents. During the summer of 1806, President Thomas Jefferson sent an expedition up the Red River to explore that portion of the recently acquired Louisiana Purchase. The expedition principals, Thomas Freeman and Peter Custis, both kept journals of their day-to-day activities.^{11.1} After a tortuous upstream trip around the eastern side of the Great Raft, both journalists upon re-entering the river recorded a series of events relating to the Caddo. Figuring prominently in their journal entries was the Coushatta village located at Cedar Bluff on the east side of the Red River some 25 miles north of present-day Shreveport. McCrocklin has identified this site as 16B0173. 11.2 Glass described the Coushattas who occupied the site at the time of his trip through the region in 1808 as being "friendly with the Caddoes who own the Country & who used to occupy the same spot."11.3 Flores reproduced Custis' "A List of Notable Points on the Middle and Upper Red River" in which Custis noted a distance of 80 miles (by the river) between the Little River (Sulphur Fork) and the "Conchetta villages [sic] (where the Cadoux lived, 9 years ago)."11.4 Sibley provided an identical figure, but he notes that the site was the "Late Caddo villages [sic] where they lived five years ago."11.5 While precise mileages by river cannot be determined more than 200 years after the events described, it certainly appears that the Coushatta village of Custis and that of Sibley is one in the same. Thus it appears that the Caddo occupied the Cedar Bluff site sometime between 1797 (Custis) and 1800 (Sibley).
 - 11.1. Flores, Dan L. *Jefferson & Southwestern Exploration: The Freeman & Custis Accounts of the Red River Expedition of 1806*. Norman, OK: University of Oklahoma Press, 1984.
 - 11.2. McCrocklin, Claude. "The Red River Coushatta Indian Villages of Northwest Louisiana 1790-1835." *Louisiana Archeology*. Vol. 12 (1985). pp. 129-178.

- 11.3. Glass, Anthony. Dan L. Flores (editor). Journal of an Indian Trader: Anthony Glass and the Texas Trading Frontier, 1790-1810. Texas A&M Southwestern Studies, No. 4. College Station, TX: Texas A&M Press, 1985. p. 39
- 11.4. Flores, Dan L. Jefferson & Southwestern Exploration: The Freeman & Custis Accounts of the Red River Expedition of 1806. Norman, OK: University of Oklahoma Press, 1984. p. 328.
- 11.5. Sibley, John. "Distances up Red River, by the Course of the River." American State Papers. Indian Affairs. Vol. I. pp. 730-731.
- 12. The Peach Orchard Bluff village is *not* a named Caddo village in period documents. The case for the possible existence of this village is based on the author's premise that Dehahuit's village is located on Paw Paw Bayou.

John Sibley noted in his "Historical Sketches" (April 1805) that the Caddo

settled on the river nearly opposite where they now live, on a low place, but were drove from there on account of its overflow, occasioned by a jam of Timber choking the river at a point below them. 12.1

The author suggests that this village was located near the site Jehiel Brooks selected in 1830 for the new Caddo Agency - a point situated just south of modern-day Shreveport. The location was given the name

Peach Orchard Bluff due to the presence of peach trees growing in the area. 12.2 The 1830-era Caddo Agency was located west of Bayou Pierre close to a site the French knew as "the Point." 12.3 Its strategic location near where Bayou Pierre diverged from the Red River (along with the presence of peach trees which are assumed to have been closely associated with Caddo villages) would certainly suggest the possible presence of a late 1700s-early 1800s-era Caddo village nearby. The site was probably abandoned with the approach of the Great Raft which finally closed the Bayou Pierre chute in the spring of 1800.^{12.4}

- 12.1. Sibley, John. "Historical Sketches of the Several Indian Tribes in Louisiana, South of the Arkansas River, and Between the Mississippi and River Grande." American State Papers. Indian Affairs. Vol. I. p. 721.
- 12.2. National Archives and Records Administration. Letters Received by the Office of Indian Affairs, 1824-1881, Caddo Agency. M234, Roll 31. Letter from Jehiel Brooks, Agent to John H. Eaton, Secretary of War, February 16, 1831.
- 12.3. Sibley, John. Letter to General Henry Dearborn, Secretary of War, April 10, 1805. American State Papers. Indian Affairs. Vol. I. p. 728.
- 12.4. We know from Sibley's 1805 "Historical Sketches" that the primary Caddo village on Paw Paw Bayou (Dehahuit's village)^{12,4a} was first occupied prior to 1800,^{12,4b} the settlement having been relocated from a "low place" just above the Great Raft due to flooding. 12.4c While Sibley suggested the flooding was due to debris choking the main stream, it seems more likely the flooding was related to the formation of the Sodo Lakes complex itself. Sibley's letter of November 28, 1812 suggests that the lakes had "been formed within about Twelve years ..."12.4d

12.4a. If, as the author contends, Dehahuit's village was located on Paw Paw Bayou (and we know from Brooks' answer to the memorial of Samuel Norris that Dehahuit lived in the same village from at least 1805 until his death in 1833), then, according to Sibley, his village was probably previously located to the east in a "low place," on or very near the Red River.

12.4b. Tiller, Jr., James W. *Before the Line: A Geographical Analysis of Selected Period Records From the Caddo Lake-Sabine River Borderland of Texas, 1803-1841*. Vol. II. Caddo Indians: The Sodo Lakes Years (working manuscript).

12.4c. Sibley, John. "Historical Sketches of the Several Indian Tribes in Louisiana, South of the Arkansas River, and Between the Mississippi and River Grande." *American State Papers. Indian Affairs.* Vol I. p. 721. See also Sibley, John. Letter to General Henry Dearborn, Secretary of War. April 10, 1805. *American State Papers. Indian Affairs.* Vol. I. p. 728.

12.4d. National Archives and Records Administration. *Letters Received by the Secretary of War, main series, 1801-1870*. M221, Reel 57. Letter from John Sibley, Agent to William Eustis, Secretary of War, November 28, 1812. Material courtesy the University of Southern Mississippi. Hattiesburg, MS. See also Bagur, Jacques. *A History of Navigation on Cypress Bayou and the Lakes*. Denton, TX: University of North Texas Press, 2001. pp. 11-13; Garrett, Julia Kathryn. "Dr. John Sibley and the Louisiana-Texas Frontier, 1803-1814." *Southwestern Historical Quarterly*. Vol. 49, No. 3 (January 1946). pp. 417-418.

13. Agent Sewall's Caddo village is *not* a named Caddo village in period documents, and the information

provided in the literature as to the location of this village is too vague to offer much in the way of where this site may have been. The archival record tells us that the Caddo came to Shreveport in the fall of 1838 to collect their annual annuity. Difficulties with Texans prohibited them from returning to their settlements in Texas. For their safety, Caddo Agent Charles Sewall placed the Caddo in "winter quarters"

 \dots on an extensive Island formed by the chain of Great Lakes & the Red River – a section of Country unoccupied by the whites and abounding in Game $\dots^{13.1}$

Because most of the larger "island" areas to the south of Shreveport were already settled (for instance, Rush Island), it appears likely that Agent Sewall's village was situated north of the town. The descriptors used suggest the site must have been situated in a relatively undesirable area, and the narrow region between the Red River and the lakes would have offered many such locations.

- 13.1. National Archives and Records Administration. *Letters Received by the Office of Indian Affairs, 1824-1881, Caddo Agency*. M234, Roll 31. Letter from Charles Sewall, Agent to the Commissioner of Indian Affairs, January 8, 1839.
- 14. Col. Many's Caddo village is *not* a named Caddo village in period documents. Once (Texas) General Rusk and the Caddo had signed the November 29, 1838 treaty requiring the Caddo to remain in the United States, ^{14.1} (American) Col. James B. Many, concerned about the destitute condition of the tribe

 \dots authorized the Chief to occupy a small peninsula between Cross and Sodo Lakes on Red River, on which there are no white settlements, where his people might subsist by hunting and fishing until otherwise directed. $^{14.2}$

While it is not possible as of this writing to locate with any specificity this site, it very likely will be found to lie on the north side of Cross Lake, south of Blanchard, between Shettleworth and Choctaw Bayous. 14.3

- 14.1. National Archives and Records Administration. Letters Received by the Office of Indian Affairs, 1824-1881, Caddo Agency. M234, Roll 31. Treaty between General Thomas J. Rusk and the Caddo Indians, November 29, 1838.
- 14.2. National Archives and Records Administration. Letters Received by the Office of Indian Affairs, 1824-1881, Caddo Agency. M234, Roll 31. Letter from Col. James B. Many, 3rd Infantry to Joel R. Poinsett, Secretary of War, April 19, 1839.
- 14.3. Royce, Charles C. (compiler). Map of Louisiana Cessions in Indian Land Cessions in the United States. Bureau of American Ethnology, Eighteenth Annual Report, 1896-1897 (Part 2). Smithsonian Institution. See Library of Congress, call number E51.U55 18th. (see URL, http://lcweb2.loc.gov/ cgi-bin/map_item.pl?data=/home/www/data/gmd//gmd370m/g3701m/g3701em/gct00002/ ca000028.jp2&style=gmd&itemLink=r?ammem/gmd:@field(NUMBER+@band(g3701em+gct0000 2))&title=Indian%20land%20cessions%20in%20the%20United%20States,%20comp.%20by%20 Charles%20C.%20Royce,%20with%20introduction%20by%20Cyrus%20Thomas.+-+Louisiana).
- 15. The Border village is not a named Caddo village in period documents. This village site is located on a tributary of Harrison Bayou some two miles northeast of the Middle Village on a road between that village and Shenick's Ferry on Caddo Lake.^{15.1} The settlement is depicted on the 1838 plat map of northwest Louisiana's T18N, R17W (extreme western edge of Section 6). Due to its proximity to the Middle village, it is possible that this site was a part of the Middle Village complex. 15.2
 - 15.1. Texas General Land Office. Shelby County. First Class, File 000185, Seaborn Robinson. Original Land Grant Collection, Archives and Records Division, Austin, Texas.
 - 15.2. United States Department of the Interior, Bureau of Land Management. Louisiana, North and West District. Survey Plat Map for T18N, R17W (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www. glorecords.blm.gov/ (see Search Surveys); Texas General Land Office. Shelby County. First Class, File 000185, Seaborn Robinson. Original Land Grant Collection, Archives and Records Division, Austin, Texas.
- 16. The Louisiana village is not a named Caddo village in period documents. It is depicted on the 1838 plat map of northwest Louisiana's T16N, R16W (Section 35). 16.1 This is probably the village mentioned in Bonnell's report of April 1836 as being located 12 miles from a second, more northerly, Caddo village^{16.2} (see the Dehahuit's Caddo village, Note 9).
 - 16.1. United States Department of the Interior, Bureau of Land Management. Louisiana, North and West District. Survey Plat Map for T18N, R17W (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www. glorecords.blm.gov/ (see Search Surveys).
 - 16.2. 25th Cong., 2nd sess. *House Document 351*. p. 807.

- 17. The Small village is *not* a named Caddo village in period documents. The location of the Small village site is known in a general sense from a reference made in a nearby Republic of Texas survey. The village, situated one-half mile west of the William R.D. Ward survey, was described as "a small Indian village on the waters of a Creek emptying into Haggarties Bayou a tributary of Lake Sodo." Based upon its proximity to other known historic-era Caddo villages, this site may be Caddo.
 - 17.1. Texas General Land Office. Shelby County. *First Class, File 000157, William R.D. Ward*. Original Land Grant Collection, Archives and Records Division, Austin, Texas.
- 18. The Mooringsport "village" is *not* a named Caddo village in period documents. In fact, it is not at all clear that this is even a village. The site lies just west of Mooringsport, Louisiana in Section 9, T19N, R16W on what was once a large prairie. In the 1830s period, this site would have been in close proximity to a trail leading to the major crossing on Sodo Lake. While we give this entity the name "Mooringsport village," we strongly suspect the site depicted is actually a pine hill.
 - 18.1. Delgado, Miguel. Spanish Collection, Land Survey, *SC000115:12*. Archives and Records Division. Texas General Land Office. Austin, Texas; A comparison of Delgado's survey with a modern topographic map (see United States Geological Survey. *Mooringsport*, Louisiana. Topographic Map Series, 1:24,000, 7.5 Minute Series. Washington, D.C.: United States Government Printing Office, 1982) places the "village" in question just south of Tete Bayou on a small, isolated hill located northwest of the center of Section 9, T19N, R16W.
- 19. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Maps and Field Notes* for the following: *T12N, R16W* (1837), *T13N, R16W* (1837), *T14N, R16W* (1837), *T15N, R16W* (1837), *T16N, R16W* (1837), *T17N, R16W* (1837), *T18N, R16W* (1838), *T19N, R16W* (1837), *T22N, R16W* (1839), *T23N, R16W* (1839); *T12N, R17W*
- (1837) (brief notes on extending a line west from the 3rd mile post of T12N, R16W), *T12N*, *R17W* (1839) (field notes only), *T13N*, *R17W* (1838), *T14N*, *R17W* (1838), *T15N*, *R17W* (1838), *T16N*, *R17W* (1838), *T17N*, *R17W* (1838), *T18N*, *R17W* (1838), *T19N*, *R17W* (1838), *T20N*, *R17W* (1839), *T21N*, *R17W* (1839), *T23N*, *R17W* (1839). Available from the Bureau of Land Management, Springfield, Virginia. Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).
- 20. Flores, Dan L. (editor). *Jefferson & Southwestern Exploration: The Freeman & Custis Accounts of the Red River Expedition of 1806*. Norman, OK: University of Oklahoma Press, 1984. pp. 145-146, 148.
- 21. Pichardo, Father José Antonio. Charles Wilson Hackett (editor). *Pichardo's Treatise on the Limits of Louisiana and Texas: An Argumentative Historical Treatise with Reference to the Verification of the True Limits of the Provinces of Louisiana and Texas: Written by Father José Antonio Pichardo, of the Congregation of the Oratory of San Felipe Neri, to Disprove the Claim of the United States That Texas Was Included in the Louisiana Purchase of 1803.* Vol. III. Austin, TX: The University of Texas Press, 1946. pp. 422-429.
- 22. Brooks, Jehiel. *The Answer of Jehiel Brooks to the Memorial of Samuel Norris, January 30, 1840.* Box 1, Folder 12, Item 8, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).

- 23. In the land cession of 1835, the Caddo designated in Supplementary Article I (see also the preamble of these supplementary articles) that the heirs of Francois Grappe (known to the Caddo as Touline), their long-time interpreter and advisor, be granted four leagues of land (almost 18,000 acres) lying between the main channel of the Red River and Bayou Pierre north of Pascagoula Bayou.^{23.1} In the years following the treaty, Jehiel Brooks, the U.S. Commissioner who negotiated the Caddo cession, purchased the land on Rush Island from the Grappe family. His attempts to evict a number of Rush Island settlers on the land set in motion a series of legal actions that ultimately resulted in a Supreme Court of the United States opinion favorable to Brooks.^{23.2} The associated memorials, court filings and decisions offer the researcher a wealth of information on the Caddo during their years in the Sodo Lakes region.^{23.3}
 - 23.1. Brooks, Jehiel. *The Answer of Jehiel Brooks to the Memorial of Samuel Norris, January 30, 1840.* Box 1, Folder 12, Item 8, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www. aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
 - 23.2. *United States vs Jehiel Brooks et al.* 51 U.S. 442 (1850).
 - 23.3. Tiller, Jr., James W. Before the Line: A Geographical Analysis of Selected Period Records From the Caddo Lake-Sabine River Borderland of Texas, 1803-1841. Vol. II. Caddo Indians: The Sodo Lakes Years (working manuscript).
- 24. Brooks, Jehiel. *The Answer of Jehiel Brooks to the Memorial of Samuel Norris, January 30, 1840.* Box 1, Folder 12, Item 8, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
- 25. 27th Cong., 2nd sess. *House Report 1035*. pp. 73-74.
- 26. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Maps and Field Notes* for *T16N, R16W* (1837). Available from the Bureau of Land Management, Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).
- 27. United States Department of the Interior, Bureau of Land Management. Louisiana, North and West District. Survey Plat Maps and Field Notes for the following: T9N, R8W (1831), T9N, R9W (1830), T9N, R10W (1855), T10N, R10W (1831), T11N, R10W (1831), T11N, R11W (1832), T12N, R11W (1833), T12N, R12W (1832), T13N, R12W (1832), T13N, R13W (1832), T14N, R13W (1835), T15N, R13W (1833), T15N, R14W (1832), T16N, R14W (1846), T16N, R15W (1847), T17N, R16W (1839), T17N, R17W (1839), T18N, R17W (1839). Dates are taken from material provided on the BLM site. For a more specific field completion date see Figure 2 and the field notes for the specific survey. Available from the Bureau of Land Management, Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys). See also Louisiana, State Land Office. Northwestern District. Survey Plat Maps and Field Notes for T9N, R7W (1825).
- 28. Sibley, John. "Historical Sketches of the Several Indian Tribes in Louisiana, South of the Arkansas River, and Between the Mississippi and River Grande." *American State Papers. Indian Affairs.* Vol I. p. 721.
- 29. Bagur, Jacques. *A History of Navigation on Cypress Bayou and the Lakes*. Denton, TX: University of North Texas Press, 2001. pp. 18-20.

- 30. United States Geological Survey data for the 1996 to present period indicates high water events on Cross Lake range between 172 and 175 feet. 30.1
 - 30.1. See URL, http://waterdata.usgs.gov/la/nwis/dv?cb_00065=on&format=gif_default&begin_date=1996-08-01&end_date=2009-09-29&site_no=07344480&referred_module=sw
- 31. The Wallace family was one of the pioneering middle Red River valley families having lived in the area since the late 1700s.^{31.1} As a resident of Natchitoches, and an individual interested in Indian matters, Sibley would have had the occasion to have made the acquaintance of many members of this family.
 - 31.1. 27th Cong., 2nd sess. *House Report 1035*. p. 24; Terán, Manuel de Mier y. Jack Jackson (editor), John Wheat (translator). *Texas by Terán: The Diary Kept by General Manuel de Mier y Terán on His 1828 Inspection of Texas*. Austin, TX: The University of Texas Press, 2000. pp. 249-250; 19th Cong. 2nd sess. *House Report 102*. pp. 19-21.
- 32. National Archives and Records Administration. *Letters Received by the Office of Indian Affairs, 1824-1881, Caddo Agency*. M234, Roll 31. Memorial from the Chiefs and Head Men of the Caddo Nation to the Secretary of War, January 9, 1837.
- 33. 27th Cong., 2nd sess. House Report 1035. p. 76.
- 34. The phrase "first red water" refers to the first stream carrying the distinctive red water associated with the Red River. Prior to June 1833 when Henry Shreve cleared the Great Raft from the old channel of the Red River up to the area of Shreveport, much of the water of that river was actually passed south via Bayou Pierre. It was the contention of the Rush Island settlers that the Caddo boundary was not the Red River, but rather Bayou Pierre. They argued that the lands acquired from the Caddo did not include their improvements on Rush Island. In effect, the Caddo had no right to set aside a reservation for the Grappe family thus Brooks had no claim to the lands on Rush Island.

Clearly, the Islanders were not aware of the many legal precedents/technicalities^{34,1} and previous correspondence between Agent George Gray and the United States government in the mid-1820s which "set aside" a specific area for the Caddo. Gray suggested the boundaries of these lands extended

- \dots from Sulphur Fork to a large Creek called cypress Creek and is now generally known as the Caddoes's boundary line. No whites have any claim to lands within that boundary. $^{34.2}$
- ... at the mouth of Sulphur Fork thence, meandering, the old channel of Red River to its junction with the Cypress Bayou on the east and the Cypress Bayou on the southeast, Sulphur Fork on the west, and the Spanish line on the southwest, those lines are natural ones and generally understood as the boundary of the Caddo Lands by both Indians and Whites. 34.3

In addition, it appears Poissoit, Valentin and Laffitte were not aware of what the Caddo believed they had ceded to the United States (see Notes 35-37). From their description, these individuals clearly equated Terán's Line with the *eastern* boundary of the Caddo cession (from the line "thence west," or "out towards sunset"). The Caddo considered it the western boundary of the lands ceded. The comments of Poissoit and

the other deponents are somewhat understandable when one considers that all were testifying in support of Samuel Norris and in effect against Jehiel Brooks who was attempting to evict Norris and others from the four-league parcel of land on Rush Island Brooks had purchased from the Grappe family. A boundary such as that defined by these individuals would have placed Rush Island outside the Caddo lands.

Of course, neither Brooks nor the American government recognized Terán's Line as a legitimate boundary. In the 1835 treaty, the western boundary of the Caddo lands were defined as

Bounded on the west by the north and south line which separates the said United States from the Republic of Mexico, between the Sabine and Red rivers wheresoever the same shall be defined and acknowledged to be by the two governments.^{34.4}

Brooks, in his summation to the District Court jury, went right to the heart of the testimony of Poissoit, Valentin and Laffitte when he noted that

some of the witnesses assert that the Caddos only intended to sell west of Terán's line, which, if that line was correct, would have been selling nothing, as all west of it would have been in Mexico.^{34.5}

While the Caddo may have hoped that Terán's Line would be the western boundary of their lands (thus, as noted in the text of the article, permitting them to keep all of their villages), such was not to be the case.

- 34.1. United States vs Jehiel Brooks et al. 51 U.S. 442 (1850).
- 34.2. National Archives and Records Administration. Letters Received by the Office of Indian Affairs, 1824-1881, Red River Agency. M234, Roll 727. Letter from George Gray, Agent to the Secretary of War, May 26, 1825.
- 34.3. National Archives and Records Administration. Letters Received by the Office of Indian Affairs, 1824-1881, Red River Agency. M234, Roll 727. Letter from George Gray, Agent to James Barbour, Secretary of War, September 30, 1825.
- 34.4. 27th Cong., 2nd sess. *House Report 1035*. pp. 74-75.
- 34.5. Brooks, Jehiel. Summation to the Jury, ca. May 1840 in the case of Jehiel Brooks vs Samuel Norris, District Court of Caddo Parish. Box 2, Folder 2, Item 1, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
- 35. 27th Cong., 2nd sess. *House Report 1035*. pp. 29-30.
- 36. 27th Cong., 2nd sess. House Report 1035. pp. 27-29.
- 37. 27th Cong., 2nd sess. *House Report 1035*. pp. 34-35.
- 38. Surveys between the Sabine and Red Rivers made for titles under Radford Berry, Commissioner. Atlas Collection, Document 14. Professional Services Program Area, Surveying Division. Texas General Land Office. Austin, Texas.

- 39. Tiller, Jr., James W. Before the Line: A Geographical Analysis of Selected Period Records From the Caddo Lake-Sabine River Borderland of Texas, 1803-1841. Vol. I. An Annotated Atlas of International Boundaries and Republic of Texas Administrative Units (forthcoming).
- 40. Brooks, Jehiel. *Summation to the Jury, ca. May 1840 in the case of Jehiel Brooks vs Samuel Norris, District Court of Caddo Parish*. Box 2, Folder 2, Item 1, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
- 41. Brooks, Jehiel. *Summation to the Jury, ca. May 1840 in the case of Jehiel Brooks vs Samuel Norris, District Court of Caddo Parish*. Box 2, Folder 2, Item 1, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
- 42. 27th Cong., 2nd sess. *House Report 1035*. pp. 103-105.
- 43. Brooks, Jehiel. *Summation to the Jury, ca. May 1840 in the case of Jehiel Brooks vs Samuel Norris, District Court of Caddo Parish*. Box 2, Folder 2, Item 1, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
- 44. Brooks, Jehiel. *Summation to the Jury, ca. May 1840 in the case of Jehiel Brooks vs Samuel Norris, District Court of Caddo Parish*. Box 2, Folder 2, Item 1, The Brooks-Queen Family Collection. The American Catholic History Research Center and University Archives. The Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/brooks/brooks.shtml).
- 45. United States Department of the Interior, Bureau of Land Management. Williams and Terrell, *Articles of Agreement for Surveying R17W*. April 1, 1837. Springfield, Virginia.
- 46. 27th Cong., 2nd sess. House Report 1035. p. 74.
- 47. Concerns expressed by Texas settlers about Indian depredations during and in the period following the Revolution^{47.1} caused General Gaines to restrain the Caddo from migrating west as required by the 1835 treaty. Gaines sent at least two fact-finding expeditions into Caddo country to ascertain conditions among the tribe. The reports of both Lt. Bonnell (April 1836)^{47.2} and Major Riley (August 1836)^{47.3} found the Caddo peaceful and did not perceive them to represent a threat to the frontier populations. These reports apparently caused Gaines to grant permission for the Caddo to begin their migration westward sometime during the fall of that year, probably after difficulties with their agent Jehiel Brooks over their annual annuity had subsided.^{47.4}
 - 47.1. 25th Cong., 2nd sess. *House Document 351*. pp. 773-775.
 - 47.2. 25th Cong., 2nd sess. House Document 351. pp. 774-775, 807.
 - 47.3. 25th Cong., 2nd sess. *House Document 351*. pp. 815-818.
 - 47.4. 27th Cong., 2nd sess. *House Report 1035*. pp. 36-37; copies of letters from John G. Green, J.C. McLeod and Jehiel Brooks, January 10, 1837 and January 26, 1837. Box 1, Folder 9, Item 8, The Brooks-Queen Family Collection, American Catholic History Research Center and University Archives,

Catholic University of America. Washington, D.C. (see URL, www.aladin.wrlc.org/gsdl/collect/ brooks/brooks.shtml).

- 48. 25th Cong., 2nd sess. *House Document 351*. pp. 815-818.
- 49. Azco (Arco), Santos de. See GA 120-0023; GA 120-0068; GA 122-00216; GA 127-00575 GA 127-00578; GA 128-00659, 85-1. George Antonio Nixon Collection. Special Collections, The University of Texas at Arlington Library. Arlington, Texas.
- 50. 25th Cong. 2nd sess. *House Document 351*. pp. 815-816.
- 51. Texas General Land Office. Shelby County. First Class, File 000187, Francisco Valmore. Original Land Grant Collection, Archives and Records Division, Austin, Texas. This survey served as an anchor point for several adjoining surveys completed during the early spring months of 1838. On March 5, 1838, Lewis Watkins surveyed a tract for Holland Anderson that joined the Valmore-Smith survey on the north. In the general reference section of the field notes, Watkins observed that the southeastern corner of the survey (which adjoined the northeastern corner of Valmore's survey) was located

... about 2 or 3 miles S.E. of the Middle Caddo village, 2340 varas S. of the road leading from said village to Shreavesport ...51.1

Upon filing his notes with the Shelby County Clerk, this particular section was re-written (probably by threcording clerk) to read

... about 2000 varas of the East Caddo Village, 2340 varas south of the road leading from said village to Shreavesport ...^{51.2}

On April 13, 1838, Lewis Watkins surveyed a tract for Jeddiah Payne that joined Holland Anderson's tract on the east. In the notes Watkins observed that the survey began on

... the northeast corner of a survey marked J.S. [James Smith] know[n] also by the name of Big Spring village survey and the S.E. corner of Holland Anderson's survey ...^{51.3}

While the Payne field notes were certified on May 1, 1838, they were withdrawn by Watkins on August 11 of that year

... on plea that the whole of the land has been taken in by the U. States. 51.4

Lewis Watkins was a Shelby County deputy surveyor who at the time lived in what is today Shelby County. The Anderson (and Payne) surveys were some of Watkins' earliest efforts in present-day Harrison County (the Land Office opened for surveys on February 1, 1838). While Shelby County Deputy Surveyor John S."Rip" Ford (who surveyed the Valmore-Smith league on February 22, 1838) was aware of the presence and name of the Big Spring village on upper Paw Paw Bayou (probably because his survey party was accompanied by local resident John Graves who we know from Ford's memoirs wished to own the lands around the village), 51.5 newly-arrived Watkins was not.

Why did the Shelby County Clerk use the name East Caddo and not Big Spring village? It appears that when the Clerk made the correction to Watkins' field notes (sometime between March 5 and April 13), he was not aware of the *name* Big Spring village – although he certainly was aware of the presence of the village and the relative location of other villages in the area (the larger villages would have been landmarks well known to local inhabitants). He would not have called the Big Spring village the South village – that name was already accounted for. Too, he doubtless knew of American intentions to survey R17W which would include the South (Dehahuit) village. Removing that village from Texas proper (but still giving deference to the name South village as used by local inhabitants), the name East Caddo village was a reasonable name to have used considering his knowledge of area villages and barring any information as to a specific name for what was to become known as the Big Spring village.

We know from his memoirs (and the many late winter-early spring eastern Harrison County surveys bearing his signature),^{51.6} that Ford likely did not return to Shelbyville until sometime in late spring. It was at this point that the Clerk would have become aware of a local name for the Big Spring village. Watkins, who continued surveying in eastern Harrison County during the spring months, doubtless at some point prior to April 13 learned of the Big Spring name and began to use it.

As an aside, but of interest regarding the undefined Texas-United States boundary in this area, on April 12 (one day before Watkins surveyed the Payne tract which lay in what was to become T18N, R17W), American surveyors platted the north boundary of T18N, R16.^{51.7} Because Dehahuit's village lay within two miles of the southwestern boundary of this township, it would have been apparent to all that the village would fall within the bounds of the United States once the survey of T17N, R17W was completed. The survey of T18N, R17W began on May 3 and was probably completed within two weeks.^{51.8} Watkins acknowledged the superior jurisdiction of the American surveys in R17W with his August 11 comment regarding Payne's survey.

- 51.1. Texas General Land Office. Shelby County. *First Class, File 000152, Holland Anderson*. Original Land Grant Collection, Archives and Records Division, Austin, Texas.
- 51.2. Texas, Harrison County. Survey Record Book A. pp. 22-23.
- 51.3. Texas, Harrison County. Survey Record Book A. p. 91.
- 51.4. Texas, Harrison County. Survey Record Book A. p. 92.
- 51.5 Ford, John Salmon. Stephen B. Oates (editor). *Rip Ford's Texas*. Austin, TX: The University of Texas Press, 1963. p. 25.
- 51.6. Ford, John Salmon. Stephen B. Oates (editor). *Rip Ford's Texas*. Austin, TX: The University of Texas Press, 1963. pp. 25-27; see also some 17 late February through early May 1838 surveys by John Ford in Texas Harrison County. *Survey Record Book A,* pp. 4, 6-7, 36-37, 42-43, 43-44, 139, 142-143, 182-191.
- 51.7. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Field Notes for T18N, R16W* (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).

51.8. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Field Notes for T18N, R17W* (1838). Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).

52. See Note 8.

53. Tiller, Jr., James W. and Albert Wayne Tiller. *Our American Adventure: The History of a Pioneer East Texas Family, 1657-1966.* Huntsville, TX: The START Group, 2008. pp. 101-121.

54. *Petition from Citizens of Red River County to the Congress of the Republic of Texas, March 11, 1837.* Memorials and Petitions. Manuscript Collections, Archives and Information

Services Division, Texas State Library and Archives Commission, Austin, Texas; Tiller, James Weeks. "The March 11, 1837 Petition to the Congress of the Republic of Texas for the Creation of a New County Called Green." *Stirpes, the Quarterly Journal of the Texas State Genealogical Society*. Vol. 47 (December 2007). pp. 5-17.

55. Evidence that Caddo were still to be found in the area would include comments made by John S. "Rip" Ford in his memoir. Ford, a Deputy Surveyor for Shelby County, was making his way through what would become eastern Harrison County in February-March 1838, when he stopped at the "Big Spring village" – a village "inhabited by Caddo Indians." He also noted that "within a radius of twenty miles there were three or four Indian towns." Earlier, on March 11, 1837, 108 individuals, most of whom lived south of Caddo Lake and east of Trammel's Trace, sent a petition to the Congress of the Republic of Texas seeking the creation of a new county and land office. While the petitioners indicated that "we are all living without law or regulations amongst us," no mention was made of any difficulties with Indians. 55.2

55.1. Ford, John Salmon. Stephen B. Oates (editor). *Rip Ford's Texas*. Austin: The University of Texas Press, 1963. pp. 25-26.

55.2. *Petition from Citizens of Red River County to the Congress of the Republic of Texas, March 11, 1837*. Memorials and Petitions. Manuscript Collections, Archives and Information Services Division, Texas State Library and Archives Commission, Austin, Texas.

56. For references to the North Caddo village see Note 6. In at least one instance, this village was referred to as the Upper Caddo village. ^{56,1}

56.1. Texas, Harrison County. District Court. Survey Record Book A. p. 128.

57. The reader will remember that Jehiel Brooks *did* provide a name for Dehahuit's village – "the Key village." This may well have been the name used by Brooks as well as those he was most in contact with – Louisiana residents living in the area between the Caddo Agency and Natchitoches. For such individuals, the designation "South" would have had little meaning. From their perspective, Dehahuit's village was not the most southern Caddo village (that being the *un-named* in period documents Louisiana village). However, as the home of the great Caddo chief, Dehahuit's village would have been a place of significance (read as "Key," "most important," "primary or main") for both Brooks, whose responsibilities included seeing to the well-being of the Caddo, as well as local residents, whose activities within the Caddo lands would have been subject to Brooks' scrutiny. While research efforts in the records of Caddo Parish have to date turned up no reference to Dehahuit's village, it is the opinion of the author, as of this writing, that "Key village" was the name used by Louisiana residents to identify what Texas settlers knew as the South Caddo village.

- 58. 19th Cong. 2nd sess. *House Report 102*. pp. 19-21.
- 59. 27th Cong. 2nd sess. *House Report 1035*. p. 24.
- 60. See Notes 5-18 for the location of the Indian villages. The Sulphur Fork Factory/Agency was described as being

...just below the junction of this river [the Sulphur Fork with the Red River] there is a high Bluff, on the west side of red river, about half a mile in length.^{60.1} ... For one mile and a quarter below the Fork the Bluff is from eight to eighty feet above high water.^{60.2}

The Caddo Prairie agency, located in Section 24, T21N, R15W, is depicted on Alban and Oliver's map.^{60.3} The Caddo Agency is located approximately six miles south of Shreveport near the present-day community of Forbing near the section line for Sections 7 and 8, T16N, R14W.^{60.4} The roads depicted on Figure 1 in Louisiana are adapted from Note 19. For those in Texas, see Note 60.5.

- 60.1. National Archives and Records Administration. *Letterbook of the Natchitoches-Sulphur Fork Factory*. M234, Roll T-1029. Letter from James Fowler, Factor to Thomas L. McKenney, Superintendent of Indian Trade, May 9, 1817. p. 115.
- 60.2. National Archives and Records Administration. *Letterbook of the Natchitoches-Sulphur Fork Factory*. M234, Roll T-1029. Letter from James Fowler, Factor to Thomas L. McKenney, Superintendent of Indian Trade, June 25, 1818. p. 144.
- 60.3. Route to Surround Red River Raft by contractors Alban & Oliver (map). Under Act of the Legislature of the State of Louisiana to improve Red River Navigation, Approved September 8, 1869, With other data from the U.S. Historic Records. And engineering records of the War Department and the Louisiana Geological Survey. Archives and Special Collections, Noel Library, Louisiana State University, Shreveport. Shreveport, Louisiana.
- 60.4. The Caddo Agency is depicted on George Morse's 1842 survey plat map. See Hardin, J. Fair. "An Outline of Shreveport and Caddo Parish History." *The Louisiana Historical Quarterly*. Vol. 18, No. 4 (October 1935). p. 22.
- 60.5. See Texas General Land Office. Map Collection. *Harrison District*. 1840. GLO Map Image 1515, and *Harrison County*. 1846. GLO Map Image 1460. Archives and Records Division, Austin, Texas; Tiller, Jr., James W. and Albert Wayne Tiller. *Our American Adventure: The History of a Pioneer East Texas Family*, 1657-1966. Huntsville, TX: The START Group, 2008. pp. 172-205.
- 61. See Notes 5-18 for the location of the Indian villages; United States Department of the Interior, Bureau of Land Management. Louisiana, North and West District. Survey Plat Maps and Field Notes for the following: T12N, R16W (1837), T13N, R16W (1837), T14N, R16W (1837), T15N, R16W (1837), T16N, R16W (1837), T17N, R16W (1837), T18N, R16W (1838), T19N, R16W (1838), T20N, R16W (1837), T21N, R16W (1837), T22N, R16W (1839), T23N, R16W (1839); T12N, R17W (1837) (brief notes on extending a line west from the 3rd mile post of T12N, R16W), T12N, R17W (1839) (field notes only), T13N, R17W (1838), T14N, R17W (1838), T15N, R17W (1838), T16N, R17W (1838), T17N, R17W (1838), T23N, R17W (1839), T23N, R17W (1839). Available from the

Bureau of Land Management, Springfield, Virginia. Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys).

- 62. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Maps and Field Notes* for *T21N, R16W* (1837) and *T21N, R17W* (1838). Available from the Bureau of Land Management, Springfield, Virginia. Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys); United States Geological Survey. *Trees,* Texas (and adjacent quads). Topographic Map Series, 1:24,000, 7.5 Minute Series. Washington, D.C.: United States Government Printing Office, 1962.
- 63. United States Department of the Interior, Bureau of Land Management. *Louisiana, North and West District. Survey Plat Maps and Field Notes* for *T17N, R16W* (1837) and *T17N, R17W* (1838). Available from the Bureau of Land Management, Springfield, Virginia. Paper copies (18" X 24") may be acquired from the Bureau of Land Management in Springfield, Virginia. Also available online at http://www.glorecords.blm.gov/ (see Search Surveys); United States Geological Survey. *Waskom,* Texas (and adjacent quads). Topographic Map Series, 1:24,000, 7.5 Minute Series. Washington, D.C.: United States Government Printing Office, 1982.
- 64. See Notes 5-18 for the location of the Indian villages. The roads depicted on Figure 5 in Louisiana and the townships are adapted from Note 19. For the location of the roads in Texas, see Note 60.5. For the calculation of Terán's Line, see Note 39.

ANALYZING THE ARKANSAS RIVER CADDOAN CULTURAL LANDSCAPE

Robert L. Brooks

Abstract

This paper examines the Arkansas River Caddoan cultural landscape through use of "architectural grammar". Architectural grammar presents a mechanism to look at the practices of Arkansas River Caddoans as they construct their mound and residential places. Through this analysis, five different cultural landscapes were constructed: residential places, single mounds without residential occupation, single mounds with residential occupation, multiple mounds of the same construction type, and multiple mounds of different construction type. Further analysis of these places on the landscape suggest that rather than ordered hierarchy of centers, that the Caddoan cultural landscape represents an effort to build to a formalized template.

Introduction

This paper examines the cultural landscape of the Arkansas River basin Caddoan societies as presented through a GIS framework. Earlier studies examined the settlement and subsistence practices of this region (Wyckoff 1980) as well as settlement patterns/distributions (Brown, Bell, and Wyckoff 1978). More recent work by Vogel (2006) has studied ceremonial centers and mound sites using GIS analysis. My analysis builds upon Vogel's study by examining not only mound sites and ceremonial centers but also the many residential places occupied by Caddoan societies in the Arkansas River basin. The theoretical base of the analysis lies in the framework of "architectural grammar". Approximately 10 years ago, Lewis, Stout, and Wesson's (1998) introduction to Mississippian Towns and Sacred Spaces established the concept of an architectural grammar. Architectural grammar, derived from the religious and political practice of the Mississippian communities, resulted in a blue print for the ritualized construction of towns and centers. At least portions of this grammar, they argued, can be archaeologically visualized. Their consideration was focused on the built environment and did not include other elements of the cultural landscape. Knapp and Ashmore (1999: 10-13) describe constructed, conceptualized, and ideational landscapes. Constructed landscapes reflect the built environment and represent an active intervention by a group in modification of the natural landscape in some fashion. In other cases, the natural landscape may have associative religious, artistic, or social meaning. This reflects a conceptualized landscape. The third landscape form is an ideational one that takes on the role of serving as a symbolic reference for mythological histories or other group references. As theories of the cultural landscape have continued to evolve, there has been a movement away from the basic architectural grammar or built environment to one consisting of deeper, structural forms. The desire in this paper is to return to examining the cultural landscape of the town and center as cultural/sacred landscapes. Thus, this "grammar " serves as a tool by which to distinguish structural differences in the construction of residential as well as ceremonial places of the Caddoan cultural landscape.

Caddoan Cultures

Caddoan is the term used in reference to the westernmost mound building societies of the Mississippian World (Rogers and Sabo 2004). Sites associated with this cultural expression extend from Northwest Arkansas and Northeast Oklahoma south to Northwest Louisiana and Northeast Texas - tethered around epi-centers such as Spiro Mounds in Oklahoma and the George C. Davis mound group in Texas (Figure 1a-b). Caddoan society is expressed through an arrangement of hamlets, villages, single mound sites, and mound centers distributed along principal waterways of the region. It has been recognized for some time that the Caddoan cultural landscape has notable differences from those of the greater Mississippian pattern. However, large quantities of highly prestigious funerary offerings from sites such as Spiro belie the Caddoan cultural expression as being of lessened significance in the Mississippian World. As Perttula (2009) has noted, while the Caddo (Caddoan) area is clearly involved in the Mississippian expression, there is also evidence that points to the independent development of many aspects of Caddo (Caddoan) society.

While there are differences between the Caddoan cultural landscape and that of Mississippian societies in the southeast and Midwest, there are also distinguishing characteristics between the Caddoan patterns of the Arkansas River basin and that of the Red River basin. This has led to some of us describing the Red River pattern as the Red River Caddo due to a direct cultural affiliation with known historic Caddo groups (e.g., the Hasinai, Kadohadacho, Natchitoches, Anadarko, etc) and the Arkansas River pattern as the Arkansas River Caddoan due to a lack of direct cultural affiliation with any known historic Caddo group. In fact, the Arkansas River basin Caddoan could well represent the historically known Wichita (e.g., the Tawakoni) or Kichai (c.f, Wyckoff 1985) or groups of Caddoan language speakers that did not survive into historic contact times. While this may seem confusing terminology, especially to those unfamiliar with the Caddoan area, it serves to highlight the fact that the Caddoan area should not be viewed as culturally homogenous.

Schambach has critically examined the differences between the Arkansas River basin Caddoan and the Red River basin Caddo and argued persuasively for the Arkansas River basin cultures representing a pattern that more closely parallels that of the Mississippi River valley. Based principally on material culture, he suggested that the Arkansas River basin Caddoan pattern was derived from priestly rulers traveling upstream on the Arkansas River (Schambach 1993a, 1993b, 1999). These were thought to reflect Tunican "traders/religious leaders" that ultimately resulted in an Arkansas River pattern focused around an "entrepôt" system - exchanging bison hides and other Plains goods for the religious paraphernalia associated with the Mississippian World. This view was initially challenged by Bruseth, Wilson, and Perttula (1995) who argued that little evidence exists for the presence of an entrepôt system between Spiro and towns/centers on the Red River or the Plains. I also argued that evidence for such a trade model was lacking in the archaeological data and that bison becomes an important commodity only within the later Fort Coffee phase cultures (Brooks 1996). I later suggested that although Schambach was correct in noting significant cultural distinctions between the two river basins, these differences were perhaps more related to a religious metaphor than an economic one (Brooks 2006). These distinctions certainly merit further critical examination, but in this analysis, the emphasis is on the expressions of the Caddoan cultural landscape in the Arkansas River basin. Future work can then compare these characteristics to those that have been identified for the Red River Caddo cultures in southeastern Oklahoma (Brooks 2008).

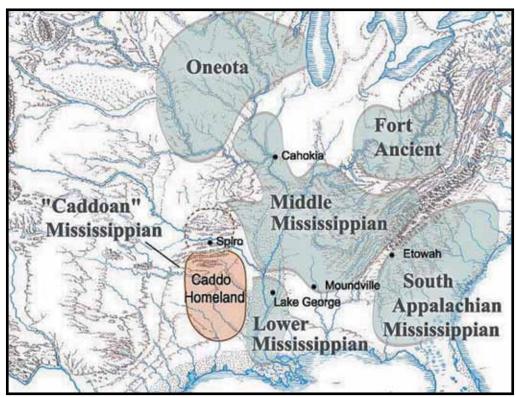


Figure 1a. Map depiciting the extent of the Mississippian cultural development (image from Texas Beyond History, http://www.texasbeyondhistory.net/tejas/fundamentals/miss.html).

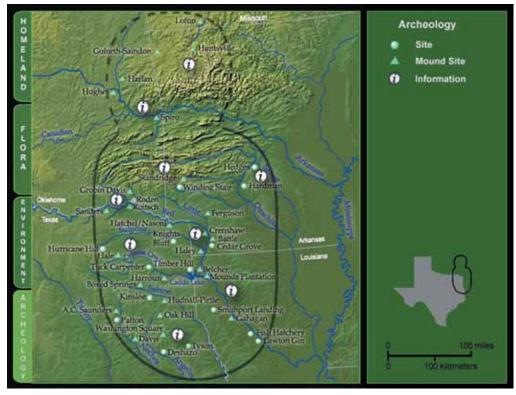


Figure 1b. The Caddoan culture area in Arkansas, Louisiana, Oklahoma, and Texas (image from Texas Beyond History; http://www.texasbeyondhistory.net/tejas/map/index.html).

Arkansas River Caddoan Chronology

Brown (1996:27) has presented recent refinements in chronology for the Fort Coffee area, which can be extended to the Arkansas River basin Caddoan cultures. The Evans phase serves to define an early pre-mound construction time at Spiro and has generally been applied to early Caddoan cultural expressions elsewhere in the Arkansas River basin and generally falls within A.D. 950 – A.D. 1000. This is followed by the Harlan phase, which is viewed as the dominant cultural expression in the Arkansas River basin from A.D. 1000- A.D. 1250. In Brown's sequence, the Harlan phase is succeeded by Norman (A.D. 1250-A.D. 1350) with Norman being supplanted by Spiro (A.D. 1350-A.D. 1450). The final phase in this sequence is Fort Coffee (A.D. 1450-A.D. 1600) when mound activities cease and highly ritualized religious practices are abandoned. It should be kept in mind however, that these delineations are artifacts of archaeological interpretation. Phase differentiation is based upon distinctions in exotic ritual goods, funerary practices, and to some extent settlement distributions. It is not a case of people of the Harlan phase being replaced by the Norman phase (for example). Cranford's (2007) recent research points out that Harlan and Norman were occupied contemporaneously and it would appear here that the concept of phase means more in respect to which ceremonial center is the most prestigious rather than a major change in people's ways of life.

The Arkansas River Caddoan Database

The Arkansas River Caddoan database consists of some 500 residential and mound sites in the region. Data for this analysis were derived from the site files maintained by the Oklahoma Archeological Survey, archival data of the WPA investigations in eastern Oklahoma between 1936 and 1942 (c.f., Rogers 1978), investigations conducted by the Oklahoma River Basin Survey under the supervision of Dr. Robert Bell between 1947 and 1970, Burt Purrington's (1971), Don Wyckoff's (1980), and Charles Rohrbaugh's (1982) dissertation data, Brown's (1996) seminal study of Spiro, and other more recent investigations resulting from directed research as well as cultural resource management studies (c.f., Rogers, Wyckoff, and Peterson 1989). Analysis of these data does not come without caveats. First of all, the data used in this analysis only pertain to Oklahoma sites in the Arkansas River basin and can only be extrapolated to the remainder of the region in western Arkansas with caution. Second, there are obvious Type I and Type II errors within the data. Type I errors are cases where sites that contain Caddoan components but were not sufficiently documented and were omitted from the database. There are also some sites included in the analysis that may have been erroneously documented as Caddoan sites (Type II errors). For example, Woodland sites in Delaware County hold shelltempered ceramics—a condition generally viewed as characteristic of Spiro phase settlements. Third, this must be viewed as a coarse-grain analysis that largely ignores more refined temporal considerations due to many sites having little chronometric data beyond relative dating by material assemblage (arrowpoint styles and ceramic typology). There is also a difficulty in that Fort Coffee phase components are frequently superimposed on earlier Harlan, Norman, and Spiro phase occupations. Despite these limitations, the data are amenable to construction of a basic Caddoan "architectural grammar" and cultural landscape analysis. This also represents the first attempt at developing a comprehensive GIS visualization of the Caddoan cultural landscape that includes both residential and ceremonial places.

Comparative Examination of the Arkansas river Caddoan Landscape

The Arkansas River drainage basin presents the pattern of a broadly dispersed constructed cultural landscape. While the Ozark Highlands are a part of the natural landscape, they do not serve as serious constraints in construction of the cultural landscape (as does the Ouachita Mountain in southeastern Oklahoma; Brooks 2008). Although stream valleys in the interior of the Ozark Highlands are highly constricted and narrow,

this is less true where the Ozarks are dissected by major river systems. Here, valleys are generally broad, providing variable opportunities for the building of villages, mounds, and centers. This more accessible natural landscape (construction-wise) may potentially affect where centers are placed as religious or political considerations could have more influence than natural factors.

Examination of the some 500 sites revealed four basic forms of the constructed cultural landscape. The first is residential sites that may range from the isolated farmstead to larger villages/towns. Attempting to create some type of residential hierarchy should be approached with caution however, as in some cases, what distinguishes a farmstead or hamlet from a larger settlement is simply the extent of archaeological work conducted. The second form is that of single mounds. A third form is that of multiple mounds, all of the same structural type. The last form is that of multiple mounds exhibiting different structural type. All of these mound forms can occur with or without residential occupations. Residential occupation associated with the presence of built mounds is complicated and further discussion of this issue is presented later in the paper.

In examining the concept of an "architectural grammar" for the Caddoan cultural landscape, one question I had was whether there was a difference in natural landscape locations selected for residential places versus mounds or centers. Analysis of this question presented no clear results. A complication in this analysis was the large number of sites in the Arkansas River basin that were inundated by lake construction (1940s-1970s) which affected the reliability of documenting natural landscape attributes. In general, it appeared that only two variables had any causal relationship to construction of the cultural landscape. The first was soils: the higher the agricultural suitability indices, the greater the site densities. However, there seemed to be little distinction in soil selection whether it represented a residential place or a mound location. The other variable that exhibited some differential selection was width of the stream valley. Most multiple mound centers were situated in larger portions of the river valleys. From a practical standpoint, if you are constructing a large multi-mound center, it is desirable to have greater area available for construction of this "sacred" place.

Distinctions in the Architectural Grammar

Comparison of the constructed cultural landscape of the Arkansas River basin has resulted in the recognition of quantitative as well as qualitative differences that can be discussed in respect to the four basic forms previously identified (Figure 2). Table 1 presents the quantitative expression of these differences.

Table 1. Distribution of the Constructed Landscape by Region.

Constructed Landscape	Arkansas River Basin
Residential Places	483
Single Mound Places	6
Multiple Mound Places	2
Same Construction Type	
Multiple Mound Places	6
Different Construction Types	
Totals	497

Residential Places

Residential places are the dominant expression, representing 97% of the constructed cultural landscape (Figure 2). The Arkansas River basin's residential places exhibit a range from hamlets such as the Plantation site in McIntosh County (Briscoe 1977) to more sizeable villages/towns of 15-20 houses such as Littlefield in Le Flore County (Brown 1984). Larger towns/villages are thought to contain populations of roughly 200 people per village. However, this should not be construed to mean that population densities paralleled those of the Mississippi River valley. The Arkansas River basin populations were substantially lower than those found to the east. Even in the "metropolitan area" surrounding Spiro, it is doubtful that populations exceeded 2500 to 3000 people. These residential places also appear homogenously distributed across stream valleys. This distribution also includes the occupation of upland rock shelters – particularly in the period after mound building has been discontinued (the Fort Coffee phase). However, taking into consideration the more dispersed nature of residential places within the Arkansas River basin, they also exhibit clustering around mound centers.

Previously I had stated that this analysis would ignore attempts at chronological refinement. Despite this limitation, there are a few comments that can be made regarding the distribution of residential places on the cultural landscape through time. As previously noted by Bell (1984) and Brown (1996) the Caddoan cultural expression reaches its maximum spatial expression during the Harlan phase with the ensuing Norman and Spiro phases reflecting retraction and retrenchment. There are exceptions to this general pattern. For example, there are two extreme outliers during the Spiro phase that are found in central Oklahoma (Figure 3). The Nagle site (340K4; Schaeffer 1957) in Oklahoma County and possibly the Alcorn site (34ML1) in McClain County are example of Caddoan populations' westward movement. In the case of these two sites, they are some 100 miles from the nearest Caddoan ceremonial center (Eufaula Mound). Location of the Nagel site suggests movement up the North Canadian River for some unspecified purpose. It represents a burial population without an accompanying residential occupation. Schambach (1999) suggested Nagel represented a trading outpost, whereas I subsequently offered Nagel as an example of a group of missionaries that met with a hostile reception (Brooks 2006). The Alcorn site contains both a burial population and a residential occupation. The Caddoans occupying the Alcorn site would have traveled up the (South) Canadian River roughly the same distance as the group at Nagle. I find it intriguing that these sites are almost on a north-south line in their distance from the Arkansas River basin Caddoan homeland.

There are some distinctions in residential places that can be identified at the architectural level. During the Harlan and Norman phases, dwellings are square to rectangular with four-center post construction. During the Spiro phase, this architecture is revised to more rectangular dwellings with a two center-post arrangement. To date, there has been no consensus as to the meaning of the change in center-post arrangement. There is no evidence for intramural storage facilities in residential structures during Harlan-Norman-Spiro phase occupations, suggesting that some level of resource sharing at the community level is operating. Residential structures of the Fort Coffee phase continue the rectilinear twocenter-post architecture. However, Fort Coffee phase dwellings have more formalized central hearth construction and the presence of intramural storage facilities. Presumably, by Fort Coffee times, greater privatization of goods is occurring with concomitant decreases in community level resource sharing.

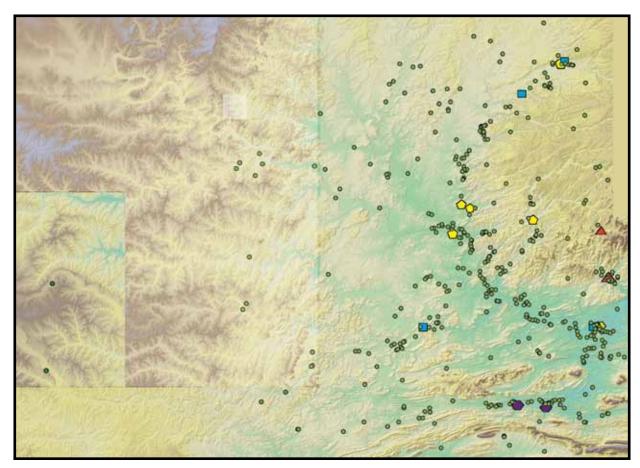


Figure 2. Caddoan cultural landscape, Arkansas River Basin. Key: Green Circles=residential places, Red Triangles=single mound centers w/o residential occupation, Blue Squares=single mound places with residential occupation, Purple Hexagons=multiple mound places of the same construction type, and Yellow Pentagons=multiple mound places of different construction type.

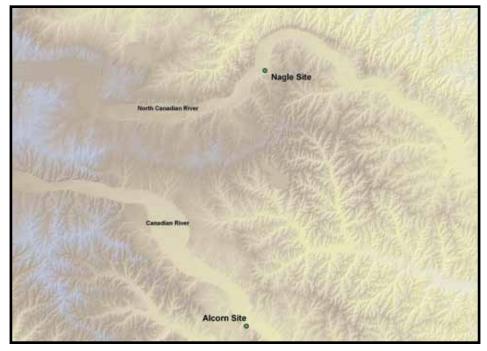


Figure 3. Location of Nagle and Alcorn sites in central Oklahoma.

Single Mound Places

There are six single mound places in the Arkansas River basin. The patterning among these single mound centers is relatively complex with three different expressions of single mound places. This is in marked contrast to the Red River basin where the predominant pattern is of single platform mounds or burned house structures. At Eufaula Mound in McIntosh County, on the western periphery of the Arkansas Basin, a burial mound occurs in association with an adjacent village (Figure 4; Orr 1945). The WPA excavated Eufaula Mound in 1940 under the supervision of Kenneth Orr. Orr (1945) specifically notes that only the single mound is present and is surrounded by village debris. The mound is four and a half feet tall and 174 feet by 110 feet in area. David Baerreis (in Purrington 1971) is also cited as thinking that a plowed-down burial mound was present at the Huffaker site in Delaware County. He thought that the highly circumscribed spatial arrangement of the burials and their slight superposition (in some cases) was indicative of a mound that had been leveled by cultivation. Another possibility is that this is the burial mound excavated by Thoburn (1931). Although Thoburn describes the excavations as taking place on the Reed property, he notes only the one mound, making no mention of the other mounds present at Reed. The Huffaker property adjoins that of Reed so it is very possible for property boundaries to have been confused, especially in 1926.

Two other single mound places contain platform mound structures with associated villages. These are the Lillie Creek site in Delaware County (Figure 5; Purrington 1971; Vogel 2002) and the Skidgel Mound two miles to the west of Spiro Mounds in Le Flore County. Purrington (1971), using Baerreis' fieldnotes, describes the Lillie Creek Mound as five feet in height and roughly 40 feet in length. Brown (1996) describes Skidgel as 20 feet high and 125 feet in diameter. The Skidgel Mound probably represents a portion of the greater Spiro ceremonial center pattern with the Cavannah Mound, some nine miles to the east in Fort Smith, Arkansas representing the paired mound. It should be noted however that the Cavannah Mound shows no evidence of an associated village. In the case of Skidgel and Lillie Creek, the residential occupation could be that of priestly elites rather than individuals of less privileged status.

The remaining two single mound sites are the Lee Creek Ceremonial Center in Sequoyah Count and Ewing Chapel Mound in Adair County (Figure 6). Both of these single mound sites with platform structure have somewhat unusual characteristics. They both occur in the uplands overlooking stream valleys. All other single mound places (and multiple mound ones as well) occur within alluvial valley systems. According to Muto (1980), the Lee Creek Ceremonial Center is 12 feet in height and 134 by 105 feet in circumference. Wyckoff (1980) reports Ewing Chapel to be about four and a half feet high and 75 feet by 45 feet in circumference. Neither Lee Creek nor Ewing Chapel appears to have associated residential occupations. Recent investigations at Lee Creek by a 2006 University of Oklahoma field school revealed evidence of temporary occupations rather than habitation features (Pluckhahn 2008). Thus, it appears that groups periodically traveled to Lee Creek for ceremonies but did not reside at the site with perhaps only a small group of priestly elites or perhaps an individual representing more permanent residents. It is also possible that there were no residents and the mound and facilities were abandoned except for ceremonial occasions. Although no investigations have been conducted at Ewing Chapel, an adjacent residential occupation has not been noted. Considering the degree of variation from other single mound places, Ewing Chapel and Lee Creek may have a much different role in the Arkansas River basin Caddoan religious system or perhaps may be affiliated with the Ozark Highlands Caddoan pattern (Kay, Sabo, and Merletti 1989).

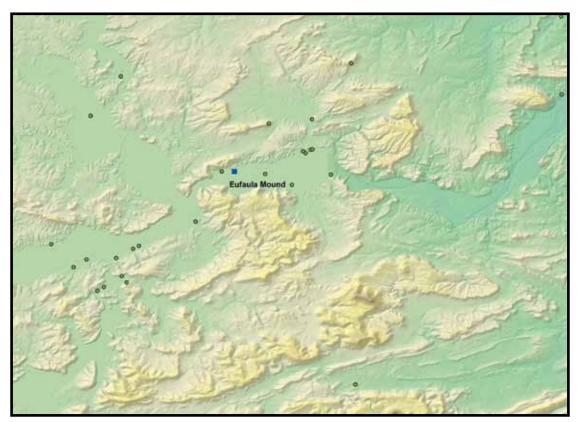


Figure 4. Eufaula Mound (represented by blue rectangle in center of figure).

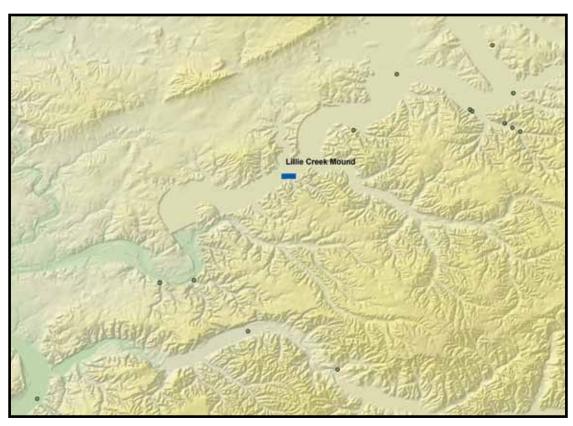


Figure 5. Natural landscape setting of the Lillie Creek Mound.

Another interesting facet of Ewing Chapel and Lee Creek concerns the surrounding residential places (Figure 6). The Lee Creek Ceremonial Center has a number of associated residential sites that are located in Little Lee Creek valley below the mound. However, Ewing Chapel can claim only one nearby residential site on Evansville Creek that appears to be associated. Does this reflect a coverage error in that no professional survey has been conducted along Evansville Creek that would identify residential places? (Funds for a survey of Evansville Creek have recently been awarded and fieldwork will take place in late 2009/2010.) Or, is Ewing Chapel an anomaly in that it has no associated residential sites - much like Cavannah Mound in South Fort Smith?

Multiple Mound Places: Same Construction Type

There are only two multiple mound places where the mounds represent the same construction type. These are the Sol Thompson mounds and the Holson Creek mounds in Le Flore County (Figure 7). This is quite unlike the pattern in the Red River basin where there are numerous multiple mound places with the same mound construction type. There were apparently two (or three?) small mounds at the Holsen Creek site although others might have been destroyed prior to the site's documentation by a WPA survey crew. None of these were described as burial mounds. As reported by Wyckoff (1980), the mounds are roughly three feet in height and 60 feet in diameter. Burials with exotic funerary goods were reportedly found eroding from the creek bank south of the easternmost mound although they did not apparently come from a mound context (Mayo 1975). Brown (1996) reports multiple house mounds from Sol Thompson based on WPA fieldnotes. In the account given by Brown (1996:169) Mound 2 contained two structures spanning the Harlan and Spiro phases. Mounds 1 and 3 contained multiple Spiro phase structures. However, these represent demolished structures that more resemble charnel house mounds than the mounds at Holsen Creek. Brown also suggests that a larger mound at Sol Thompson represents a possible burial mound. Galm's (1978:222-230) discussion of the WPA's work at Sol Thompson refers to the three houses and only one constructed mound. From these accounts, Sol Thompson may represent a multiple mound place with repeated constructions of similar mound structures or a multiple mound site containing two different mound construction types.

Residential occupation accompanying the Holson Creek and Sol Thompson mounds is also open to further examination. Galm (1978) as well as Mayo and Neal (1975) report the presence of habitation debris at Holson Creek. It is unclear from Brown (1996:169-170) and Galm's (1978:222-230) discussion of Sol Thompson whether the site contains normal habitation debris or remains that would be associated with priestly elites' presence.

From a landscape perspective, there is an interesting aspect to the two multiple mound places with similar mound construction. Both are found in close proximity in Le Flore County on the northern periphery of the Ouachita Mountains. This pattern of multiple small charnel or house mounds does not occur elsewhere in the Arkansas River drainage system although it is the typical pattern of the Caddo in the Red River drainage.

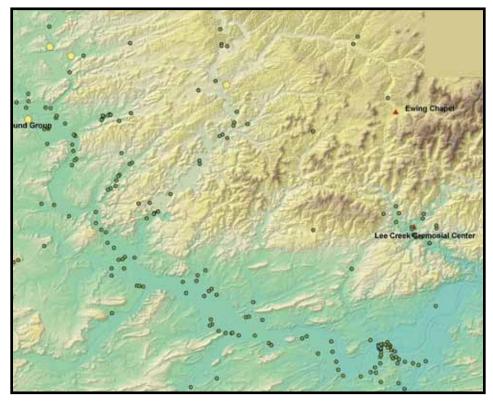
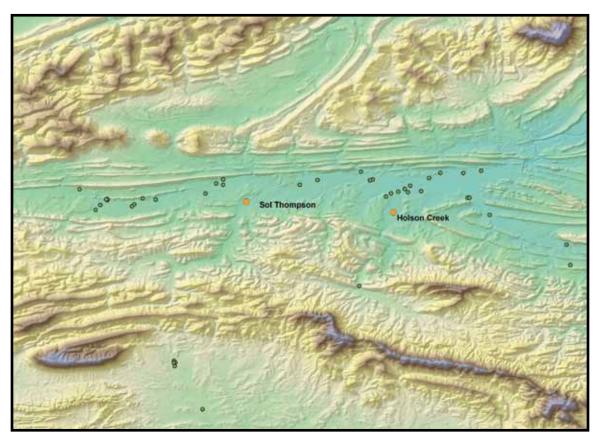


Figure 6. Lee Creek Ceremonial Center and surrounding residential places and Ewing chapel's absence of nearby residential places..



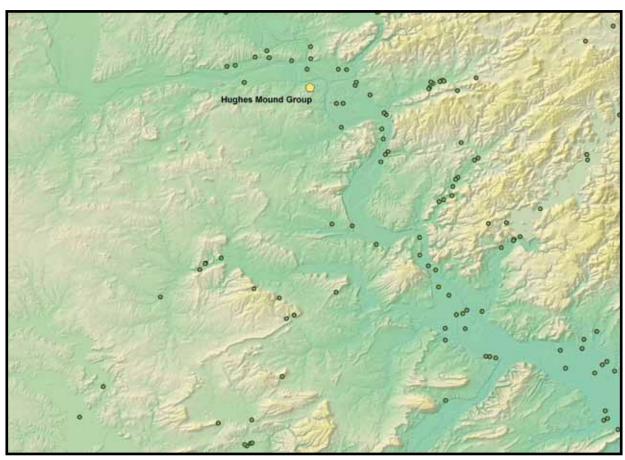
 $\textbf{Figure 7.} \ \ \textbf{Natural landscape setting of the Sol Thompson and Holson Creek Mounds}.$

I suggest that there are six multiple mound places containing different types of constructed mounds. In the Arkansas River basin, three of these places have been highly publicized: Spiro, Norman, and Harlan. In the past, some of other multiple mound sites have been viewed as only containing a single mound or a single type of constructed mound. However, previous studies sometimes did not fully consider earlier information on these sites or did not consider alternative explanations for the current mound configuration.

The Hughes site in Muskogee County has been described as having a platform mound some 19 feet in height and 175 feet in diameter (as described from the WPA field notes, Bell 1974). Lynn Howard of the University of Oklahoma, as part of WPA investigations, excavated this mound in 1938. The mound excavated by Howard is the only one noted in the WPA work. But, as Vogel (2006) notes, there are clearly two mounds present (Hughes and Fort Davis). An earlier description of the site in 1910 describes it as having seven mounds (Parsons 1910). Parsons describes two large mounds averaging some 14 feet in height and roughly 40 feet in diameter at their apex (he perhaps meant base?). He also mentions that the mound closest to the river (Hughes) has five smaller associated mounds. These mounds averaged about four feet in height and eight feet in diameter (based on the height, the diameter estimate is clearly in error). One mound has survived the urban expansion of Muskogee and currently has a protected location within a subdivision (Figure 8). Although it is close to the location of the Fort Davis mound, it would appear to be substantially smaller than 15 feet in height. It more approximates the size of the smaller mounds surrounding Hughes. There is also an isolated artifact that indirectly presents collaborative information for the presence of additional structural types of mounds at Hughes. Bell (1956) has described a large flint clay effigy pipe (the Chunky Player) that is in the collections of the St. Louis Art Museum. This effigy pipe was reportedly removed from a mound near Muskogee around 1905. These large effigy flint clay pipes have only been recovered from burial mound contexts in Oklahoma. I would suggest that this pipe came from such a mound at the Hughes site although it is unclear which one. There are also a significant number of residential places surrounding the Hughes site (Figure 9).



Figure 8. Surviving Fort davis mound at the Hughes Mound Group.



 $\textbf{Figure 9.} \ \ \text{Residential places associated with the Hughes Mound Group.}$

A similar situation exists at the Brackett site in Cherokee County (Figure 10). This site is frequently described as containing a single platform mound and associated village. Howard also excavated Brackett in 1938 as part of the WPA work program. Howard (1940) describes a single conical mound seven feet high and 100 feet in diameter. There was also a cemetery area at Brackett that contained some 25 individuals within a circumscribed area some 40 feet in diameter. At least some of the individuals appear to have been superimposed on one another. Funerary offerings with the individuals included copper covered ear spools, large bifaces, and ceramic vessels. Howard's discussion of the site suggests that the cemetery may have represented a plowed-down burial mound. A map of the Brackett site illustrates two sets of superimposed house patterns immediately adjacent to the conical mound (Figure 11). I suspect that these represent ploweddown charnel house mounds similar to House Mound 5 at Spiro (Rogers 1982a).

Another multiple mound place with different structural mound forms is the Reed site in Delaware County (Figure 12). The Reed site has not received the attention that it merits, probably due to the sketchy nature of the WPA documentation. I would note that David Baerreis considered Reed to be a highly significant mound site for the upper Grand River, perhaps paralleling Spiro for the northern Arkansas River basin. The first reputed work at the Reed site was by Joseph Thoburn in 1925 (Thoburn 1931). Thoburn stated that he excavated a pyramidal mound some 25 feet in diameter. Due to the presence of large numbers of funerary offerings in the mound, it is presumed that this represented a burial mound. There are difficulties with Thoburn's work though. He makes no mention of other mounds at the site and subsequent investigations by the WPA in 1937 did not report finding evidence of Thoburn's excavations. Of course, 12 years had passed since Thoburn dug at Reed and farming practices as well as subsequent looting could have obscured much of the evidence for his work from the WPA. As mentioned earlier, Thoburn also could have excavated a mound on the adjoining Huffaker property rather than at Reed. This would explain the absence of any mention of additional mounds as well as Baerreis' belief that there was a plowed-down (or perhaps excavated?) burial mound at Huffaker.

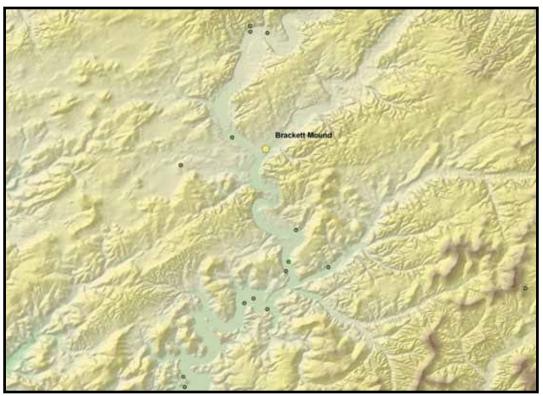


Figure 10. Natural landscape setting of the Brackett Mound Group.

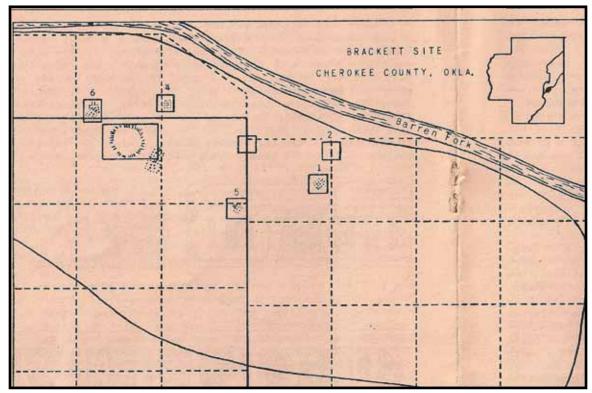


Figure 11. Brackett site map (note superimposed houses adjacent to the mound (Howard 1940:5).

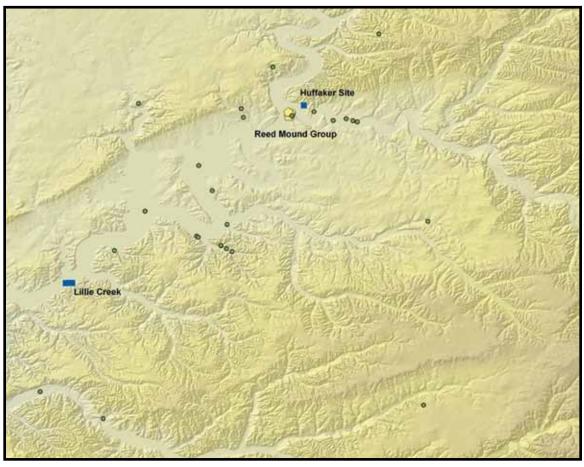


Figure 12. Natural Landscape setting of the Reed Mound Group.

The WPA conducted excavations at the Reed site from 1937 to 1939 under the supervision of David Baerreis. Based on Purrington's (1971) analysis of Baerrreis' field notes, there were 11 work areas at the Reed site. These included a platform mound some seven feet in height and 115 feet in diameter, a conical burial mound about four feet in height and 60 feet in diameter, and an area considered a "house mound (Area B-2)" that included 12 houses that were superimposed on one another with an adult and a child burial. Other areas contained midden debris and additional house patterns some of which were superimposed. At least some of the superimposed house floors probably represent the remnants of charnel house mounds although perhaps not recognized as such in Purrington's analysis.

The three remaining places with multiple mounds of different structural form are Harlan (Bell 1972), Norman (Albert et al. 2000), and Spiro (Brown 1996). The WPA excavated the Norman site (1934-1936) under the supervision of Joe Finkelstein (Bauxar). Spiro, also a WPA excavation (1936-1940) was conducted under numerous supervisors. The Harlan site was excavated by Bell in 1949-1950 and subsequently in 1958. Spiro and Harlan have received considerable analytic attention while Norman has only recently been the focus of other than a cursory overview (cf. Cranford 2007). Investigations at Harlan revealed the presence of a cojoined burial mound, a platform mound, and five house mounds (Bell 1972). The co-joined burial mound was seven feet in height with diameters of 50, 35, and 35 feet for the three joined conical mounds. The largest mound was of a platform structure being 14 feet high and 130 by 160 feet (Bell 1972). The five house mounds ranged from 3 ½ to 5 ¼ feet in height and averaged 78 feet in diameter. It is difficult to assess the exact number of mounds at the Norman site (Albert 2000). However, there were at least two co-joined mounds, a conical mound, and perhaps three or more house mounds. The largest of the co-joined mounds (Mound I) is a platform mound rather than a burial mound and is seven feet high with two conical areas 90 and 100 feet in diameter. The other co-joined mound was a burial mound estimated to be around 10 feet in height with the two conical areas being 70 feet and 45 feet in diameter (Finkelstein 1940). The remaining conical mound is a platform structure and has a diameter of 140 feet and was approximately six feet in height (Albert 2000). Because of limited and unrevealing tests of the three small mounds (approximately 1 ½ feet high), it is uncertain whether these represent house mounds or natural features on the landscape (Albert 2000). The Spiro site consists of a co-joined burial mound, two platform mounds, and at least nine smaller house mounds. Rogers (1982b) also mentions the presence of additional small midden mound-like features that occur around the plaza west of the Brown Mound. Spiro has been thoroughly analyzed by Brown (1996) and the following mound descriptions are drawn from this work. The largest mound at Spiro (the Craig Mound) consists of four co-joined conical burial mounds. They range from roughly 34 feet in height to around 12 feet (the smallest) and extend for roughly 350 feet. The larger of the two platform mounds (Brown) was approximately 15 feet in height and 200 feet by 175 feet. The smaller platform mound (Copple) is estimated to have been eight feet high and around 60 feet in diameter. Dimensions of the nine house mounds range from roughly five feet in height to about two feet and from 70 feet to around 35 feet in diameter.

Harlan, Norman, and Spiro all contain plazas that functioned as ceremonial spaces for the mound arrangements. It cannot be ascertained whether Hughes, Reed, and Brackett contained plazas. There are hints of such a spatial arrangement at Reed but little exists to suggest their presence at the other two sites.

Interpretation of the Architectural Grammar

Analysis of the Arkansas River Caddoan landscapes has demonstrated notable differences in the distribution of mound forms and residential occupations. Single mound places in the Arkansas River basin have variable expressions ranging from burial mounds to platform mounds. At least two of the single mound places exhibit no evidence for permanent residential occupation. However, they are clearly ritualized locations

that nearby communities visit on some as yet undefined cycle. Multiple mound places of the same mound structure are rare in the Arkansas River basin but, based on current information, represent either burned house mounds or charnel house locations. These places appear to also have residential populations. Six multiple mound places with different structural forms are strategically located in the Arkansas River basin. These structural elements include one or more platform mounds, a burial mound (typically co-joined), one or more charnel house mounds, and a plaza. Each of these multiple mound centers is very much like the other. In fact, tabulation of the size of platform mounds, burial mounds, and house mounds display considerable correspondence (Table 2). Examination of platform mound heights in particular is suggestive of two size groupings (4 ½ feet to 8 feet and 12 to 20 feet) that may reflect built stages (the original being the platform structure and the second being the mounding over of the platform). There is more variation in the size of the burial mounds where they range from four feet to 10 feet in height.

Table 2. Dimensions of Temple, Burial, and House Mounds, Arkansas River Drainage Basin Caddoan Mounds and Centers.

Mound	Temple	Burial	House
Eufaula		4.5'/174x110'	
Lillie Creek	5'/40' long		
Skidgel	20'/125' diameter		, , , , , , , , , , , , , , , , , , , ,
Lee Creek	12'/134'x105'		
Ewing Chapel	4.5'/75'x45'		
Holson Creek			3'/60' diameter
Sol Thompson			
Hughes	19'/175' diameter		4'/8' diameter
Brackett	7'/100' diameter		
Reed	7'/115' diameter	4'/60' diameter	
Harlan	14'/130'x160'	7'/50',35',35'	3.5'-5.25'/78'
		diameter elements	diameter (mean)
Norman	7'/90,100'	10'/70, 45'	1.5'/?
	diameter elements	diameter elements	
	6'/140' diameter		
Spiro	15'/200'x175'	34' -12'/350' long	2'-5'/35'-70' diameter
	8'/60' diameter		range

The first dimension represents mound height and the second width/length or diameter.

Craig Mound is not included in this range due to extreme variation from the remainder of the burial mounds (34 feet at its highest point; Brown 1996). The size variation in burial mounds may reflect a number of conditions including the number of elites from surrounding residential places, the population of priestly elites at the ceremonial center, the duration of use for the burial mound, and distance to the nearest other center with a burial mound (although the burial mounds at Harlan and Norman are the largest outside of Craig Mound). The range in size for house/charnel house mounds is from approximately one and a half feet in height to five feet. In most instances, this variation in height is reflective of sequential rebuilding episodes.

During their early history the mound centers had a residential occupation. By their later histories, though, they are thought to have been occupied only by priestly elites with clusters of surrounding residential communities. At one point, Brown (1996) argued that the premier center was sequential with Harlan being the earliest, followed by Norman, and subsequently by Spiro. More recent evidence would suggest that all three

held prominence, although by the mid 1400s Spiro clearly was more prestigious (Cranford 2007). In viewing the architectural grammar of the centers, I would argue that there is a "structural grammar" that accompanies the architectural aspect. This structural grammar involves elements embedded within the practices of the ceremonial center. The structural presence includes the use of charnel houses for holding deceased priestly elites as well as a place for associated rituals; the burial mound (and possible affiliated crematorium) where the deceased are ultimately interred; platform mounds where priestly leaders preside over ceremonies; and the use of the plazas for ceremonies where less hierarchical practices are involved. Brown, Bell, and Wyckoff (1978) argued for a ranked ordering of places for Arkansas River Caddoan society. However, it appears to me that it is more of a structure where a blueprint is initially established to meet a particular set of religious/ political requirements. Moreover, this structure is perceived as being established early in the life history of the mound center—with each center evolving to meet this structure. Plazas are clearly an important part of Arkansas River basin religious practice (although not well identified by early work at the Hughes, Reed, and possibly Brackett sites). Some mound places do not follow this blueprint (e.g, Eufaula, Lillie Creek, Lee Creek, Ewing Chapel, Holson Creek, and Sol Thompson). However, rather than viewing these as secondary places, it is more reasonable to consider them as operating under a different architectural grammar. For example, Lee Creek and Ewing Chapel occur on high terraces overlooking the alluvial valleys and appear to not have residential occupants. I would suggest that rather than these being secondary centers that they represent a different blueprint that has a different relationship to Arkansas River basin Caddoan religious/political practices or perhaps are more articulated with the Ozark Highlands mound groups (e.g., Goforth-Sainden, Huntsville). Holson Creek Mounds and Sol Thompson also appear of a different pattern and as I suggested earlier may be more related to Ouachita Mountains Caddo practices. The two single mound locations that are most difficult to explain in regard to deviance in the architectural grammar are Lillie Creek and Eufaula. Lillie Creek could represent the beginnings of a new center evolving from the Reed Mounds. Eufaula Mound is more problematic. Assuming that there is a consistent structure of practice in placing the priestly elite in charnel houses prior to final disposition in the burial mound, where are the charnel houses at Eufaula? And, while there are instances of platform mounds with the absence of burial mounds, there is no other case of a burial mound found without an accompanying platform mound (excepting the confusing situation at Brackett). I would argue here that the exceptionally sandy soils at Eufaula, combined with agricultural activity might have resulted in this center being significantly degraded prior to documentation.

From these observations, I am suggesting that the Arkansas River Caddoan architectural grammar holds more in common with the Mississippian World than does their Red River Caddo counterparts practices to the south (as suggested by Schambach). While the architectural grammar is more consistent with a Mississippian theme, this does not necessarily imply that Mississippian society populations were actively directing the structural grammar associated with Arkansas River Caddoan political and religious practices. This relationship between the high church of Mississippian religious history and Arkansas River Caddoans remains poorly understood. While this paper has examined the constructed landscape, I should also point out that ideational landscapes also exist and merit attention. At Spiro, the final construction of Brown Mound, thought to be a representation of the nearby Round Mountain, hints of symbolic referents as do petrogylphs found at a rock shelter near Spiro.

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FURTHER INVESTIGATIONS OF A PREHISTORIC CADDO HABITATION SITE IN THE WHITE OAK BASIN OF NORTHEAST TEXAS: THE JAMES OWENS SITE (41TT69)

Timothy K. Perttula, Mark Walters, and Bo Nelson with a contribution by LeeAnna Schniebs

Introduction

The James Owens site (41TT769) is a Middle to Late Caddo period settlement in the White Oak Creek drainage basin in Northeast Texas that was first investigated in June of 2001 at the request of the landowner, Mr. James Owens of Irving, Texas (Walters et al. 2003). At that time, the landowner was planning on building a house on the site, and during the course of clearing the land and constructing a gravel drive way to the future house site, he noted some archeological materials on the surface. Discussions between Mr. Owens, Bryan Boyd (Texas Archeological Steward Network), and Mark Parsons, then regional archeologist for the Texas Historical Commission, led to the limited 2001 investigations, which were designed to obtain basic information on the age of, and the range of material culture remains at, the James Owens site, and to further determine whether the site had research potential to address questions concerning the prehistoric Caddo archeology of the region.

During the initial work, a ca. 20-30 cm thick midden deposit was identified in the southern part of the site, but its context remained to be fully evaluated; specifically, was the midden a trash deposit, or was it directly associated with structural and habitation features? In April 2002 and February 2003, we returned to the site before Mr. Owens constructed a house there. This additional work was designed to examine the midden deposits in more detail, so as to better estimate its size, contents, and rate of accumulation; locate other cultural features (particularly post holes and hearths from structures); and obtain more radiocarbon samples from the midden and other cultural features. The dating of additional radiocarbon samples was crucial, along with the existing radiocarbon and Oxidizable Carbon Ratio (OCR) dates obtained in the first round of work (Walters et al. 2003:16-18), in refining the estimated occupation span of the James Owens site. This article is a summary of these more recent, and final, investigations.

Setting

The James Owens site is situated on a small and heavily overgrown natural rise near the edge of an expanse of "moundy uplands" (Roberts 1990) in the Post Oak Savannah of Northeast Texas (Diggs et al. 2006:Figure 4). Immediately to the south of the site is a flat stream terrace and the floodplain of White Oak Creek, a principal tributary of the Sulphur River. The current channel of White Oak Creek lies about 4 km to the south of the site. At the time of the 2001-2003 investigations, the rise had been partially cleared by the landowner, with surrounding thick woods, and with a gravel road leading from a Farm-to-Market road to the site itself (Figure 1). Lithic and ceramic artifacts were visible on the surface in the clearing.

Excavations

The first investigations at the James Owens site included ten shovel tests and three 1 x 1 m units (Units 1-3) (see Walters et al. 2003:Figure 1). At least two shovel tests (ST 1 and ST 10), but possibly three others (ST 4, 7, and 9), were situated in what was determined to be a ca. 20-30 cm thick midden deposit (Feature 1), as was Unit 1. The Woodtell-Raino complex sediments in the midden area consisted of a ca. 30 cm dark brown to very dark brown sandy loam A-horizon overlying a dark yellowish-brown sandy loam E-horizon that extended to ca. 50 cm bs (Walters et al. 2003:Figure 2). Outside the midden area (and in Units 2 and 3), the A and E horizon sediments were lighter in color and with a lower organic content, and ranged in thickness from 40 to 80 cm in thickness. The deepest sediments were recorded in ST 2 on the north side of the natural rise (see Figure 1). The subsoil is an orange clay B-horizon.

The 2002-2003 work focused on the area of the midden deposits previously investigated by the excavation of ST 1, ST 10, and Unit 1. An additional seven 1 x 1 m units (Units 4-10) were excavated here as a contiguous block, slightly offset from Unit 1 (Figure 2). These units were excavated to either 20 cm bs (Unit 7) or 30 cm bs (the remaining units). In total, including both the 2001 and 2002-2003 excavations, in addition to the ten shovel tests, 10 m^2 of the site was hand excavated in arbitrary 10 cm levels, comprising 3.05 m^3 of subsurface-sampled archeological deposits.

A profile of the east wall of Unit 10 exposed five soil zones. From top to bottom, they included a charcoal-stained organic horizon (Ao) from 0-5 cm bs; a dark brown sandy loam A1 horizon (5-9 cm bs); a very dark grayish-brown sandy loam midden deposit (A2 horizon, 9-21 cm bs); an orangish-brown sandy loam E-horizon (21-37 cm bs); and an orange clay B-horizon below 37 cm bs.

Plotting the vertical distribution of artifacts—primarily ceramic sherds (n=52), fire-cracked rock (n=1), daub (n=2), mussel shell (n=7), a lithic core (n=1), and animal bone (n=10)—recorded in situ (n=68) in the excavations of Units 4-10, more than 72% occur in the midden deposits (between ca. 9-21 cm bs). About 13% are from A1 horizon contexts (3-8 cm bs), and the remainder (from 22-30 cm bs) are from the E-horizon archeological deposits directly underneath the midden. With the exception of the mussel shell pieces, which are found primarily in basal midden and E-horizon deposits (20-25 cm bs), suggesting they accumulated at the same time as the initial deposition of the midden, the other artifact categories occur predominantly in midden contexts. In the case of the ceramic sherds, there are vertical concentrations of plotted artifacts from 9-10 cm bs, 14-16 cm bs, and 18-20 cm bs; the animal bone is also concentrated between 18-20 cm bs, near the base of the midden deposits at the James Owens site.

Features

Feature 1 at the James Owens site is the midden deposit encountered in several shovel tests and units along the southern part of the rise (see Figure 2). Although not precisely determined, the midden deposits appear to extend about 24 m east-west and ca. 6 m north-south, covering a ca. 140 m² area.

Feature 2 is a small charcoal-stained pit (ca. 35 cm in diameter) that was documented between 15-54 cm bs in Unit 3. This feature is in the northern part of the archeological deposits on the rise (see Figure 1).

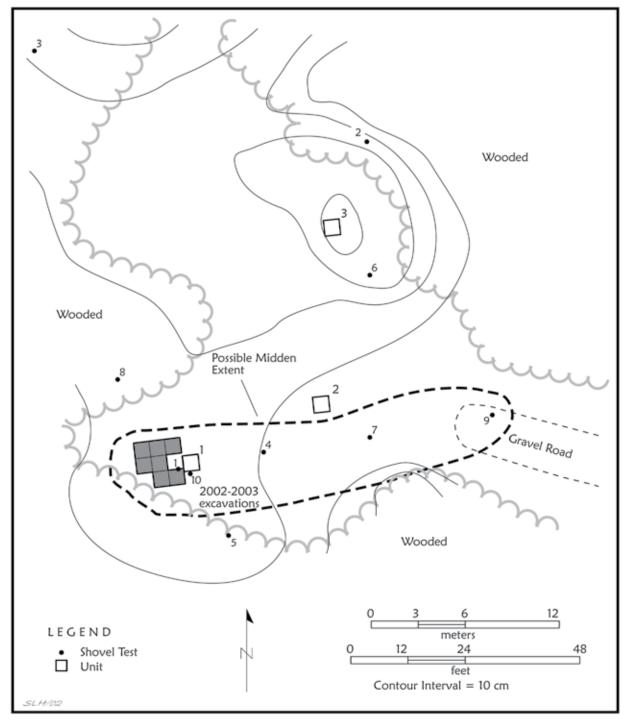


Figure 1. Map of the James Owens site (41TT769), showing shovel test and $1 \times 1 \text{ m}$ unit locations, as well as the presumed extent of the midden deposits.

Feature 3 is a basin-shaped and clay-lined hearth exposed in parts of Units 5 and 6; it likely extends into Unit 7, but we were not able to complete the excavations to the requisite depths in this unit to more fully expose it. As presently determined, the hearth is 27 cm north-south and ca. 24 cm east-west. The top of the hearth basin is at 25 cm bs, at the approximate base of the midden deposits. There is a band of charcoal-rich sediments, at ca. 20-25 cm that was exposed for more than 1 m in length to the immediate south and northeast of the Feature 3 hearth. These deposits probably represent charred materials periodically raked out of the hearth, perhaps then being spread on the surface of a house floor (although no compact or prepared house floor was detected in the excavations).

Two features have been identified in Unit 9 (see Figure 2). Feature 4 is a pit with charcoal staining and charcoal chunks in its fill. It was recognized as extending from 29-49 cm bs, and the base of the pit extended 5 cm into the clay B-horizon. Feature 5, a post hole a short distance northeast of Feature 4 (see Figure 2), is approximately 20 cm in diameter (of wall post size), with sloping sides and a rounded base. It was defined between 27-36 cm bs by its dark brown sandy loam and charcoal-flecked fill.

Feature 6 is a smudge pit (at least 15 cm in diameter, although its full extent was not determined) with a charcoal-stained fill in the northeastern quadrant of Unit 10 (see Figure 2). The pit was recognized at the base of the midden, ca. 25 cm bs, and it extended to 42 cm bs, about 5 cm into the clay B-horizon. The pit has relatively straight sides and a rounded base.

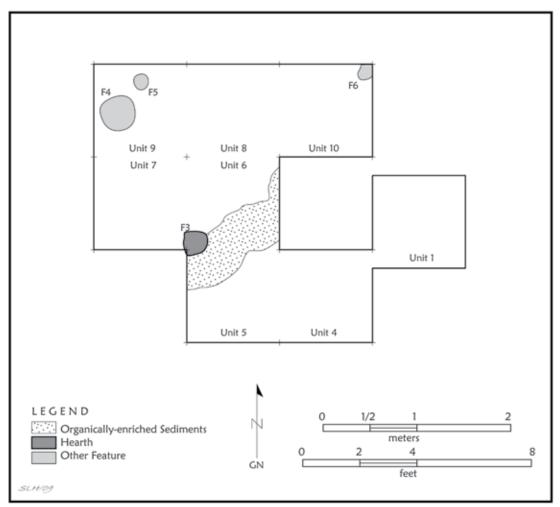


Figure 2. Excavations at 41TT769, showing location of features, hearth, and organically enriched sediments.

Radiocarbon and OCR Dating

All three radiocarbon samples submitted to Beta Analytic, Inc. for radiocarbon dating from the midden deposits at the James Owens site consisted of charred hickory nutshells (Table 1); the nutshell samples ranged in weight from 3.1-6.1 g. The calibrated intercepts of the three dates range from AD 1280 to AD 1650; the mean calibrated intercept age of the three radiocarbon samples is AD 1460.

Table 1. Radiocarbon Dates from the James Owens site (41TT769).

Lab No.	Conventional Age (B.P.)	1 Sigma calibrated (AD)	2 Sigma calibrated (AD)	Intercept, calibrated (AD)	Provenience
Beta-163724	740 ± 70	1240-1300	1180-1320, 1340-1390	1280	Unit 1, 10-30 cm
Beta-172100	270 ± 70	1520-1590, 1620-1670	1460-1690	1650	Unit 4/5, 10-20 cm
Beta-172101	420 ± 80	1420-1520, 1590-1620	1400-1650	1450	Unit 4/5, 20-30 cm

Two of the three calibrated radiocarbon samples (from Units 4 and 5) overlap at 2 sigma between AD 1460-1650. Averaging these two samples, there is a 95% chance (2 sigma) that the calibrated age of the nutshells in the midden falls between AD 1430-1670 (Stuiver et al. 1998; Talma and Vogel 1993), dating them to the Late Caddo period. However, one of the calibrated radiocarbon samples has a 2 sigma age range of AD 1180-1390, with a calibrated intercept of AD 1280 (see Table 1), suggesting that the midden may have began to first accumulate in the last part of the 13th century A.D. Furthermore, there may have been a hiatus of occupation before the final and most intensive accumulation of the midden after the early 15th century A.D.

We also collected Oxidizable Carbon Ratio (OCR) samples (200 g of sediments) from a column in Unit 1 (see Walters et al. 2003:Figure 2). The samples were collected at 5 or 10 cm intervals (Table 2), and analyzed by Oxidizable Carbon Ratio, Inc. of Essex, Vermont.

Table 2. OCR Dates from the James Owens site (41TT769).

Sample Depth	Sample No.	% Organic Carbon	OCR Date and SD (B.P.)	Age Range (A.D.)
Midden Sample	<u></u> <u>!S</u>			
8-10 cm	ACT-5519	2.925	307-325	A.D. 1625-1643
13-15 cm	ACT-5520	2.068	378-400	A.D. 1550-1572
18-20 cm	ACT-5521	1.791	527-559	A.D. 1391-1423
23-25 cm	ACT-5522	1.458	647-685	A.D. 1265-1303
28-30 cm	ACT-5523	1.181	669-709	A.D. 1241-1281
E-horizon Samp	oles below the M	<u>lidden</u>		
38-40 cm	ACT-5524	0.889	786-834	A.D. 1116-1164

The range of OCR dates obtained from the midden deposits is A.D. 1241-1643 (see Table 2). The two pedogenic marker in the column—being marked by an increase in soil pH, the frequency of coarse sediment particles, and an increase in the OCR ratio (Douglas Frink, 2001 personal communication)—date from A.D. 1391-1423 (18-20 cm bs) and A.D. 1625-1643 (8-10 cm bs). The ages of these two pedogenic markers suggests that the midden deposits at the James Owens site have been undergoing pedogenic development since about those times, and this strongly implies that the midden itself dates from the latter part of the 14th century/early 15th century to the early 17th century. Two of the calibrated radiocarbon dates fall in this same temporal interval (see Table 1). Taken together, the calibrated radiocarbon dates and the OCR dates suggest that the James Owens site midden primarily accumulated between ca. A.D. 1400 and A.D. 1650.

Artifact Analyses

A wide variety of prehistoric artifacts were recovered in the investigations at the James Owens site, primarily lithic debris, daub/burned clay, and plain and decorated ceramic sherds (Table 3). Not counting fire-cracked rocks, charred plant remains, mussel shell, or animal bones (see Appendix 1), there are 4778 artifacts from surface collections, ten shovel tests, and ten 1×1 m units. Most of the artifacts are from the excavations in the midden deposits.

Lithic debris and cores account for more than 54% of the collection from the James Owens site, indicating the importance of chipped stone tool manufacture during the Caddo occupation, and there are also 35 chipped and ground stone tools. About 19% of the collection from our investigations are sherds from fine ware and utility ware ceramic vessels. The remainder of the collection is comprised of many pieces of daub and burned clay (25.5%).

The highest densities of artifacts from the site are in ST 1 and Unit 1, apparently in the best-preserved part of the midden deposit, as well as in Units 4 and 5, all in the southern part of our block excavations (see Figure 2). Artifact densities in ST 1 and Unit 1 were a very substantial 2927-3150 artifacts per m³; in other units excavated in the midden, artifact densities ranged from 703 (in Unit 9) to 2391 (Unit 4) artifacts per m³. In Units 2 and 3, outside the midden, artifact densities ranged from only 782-857.5 per m³.

Table 3. Prehistoric Artifacts from the James Owens site.

Provenience	DS*	PS	DP	AP	T/ GS	LD/ Cores	Da/Bc	Totals
Surface	5	8	_	_	_	8	-	21
ST 1	7	12	-	1	1/-	53	76	150
ST 2	4	6	1	-	-	37	1	49
ST 3	-	-	-	-	-	2	-	2
ST 4	-	3	-	-	-	10	3	16
ST 5	-	1	-	-	-	12	17	30
ST 6	-	1	-	-	-	31	-	32
ST 7	2	3	-	-	-	10	1	16
ST 8	-	2	-	-	-	14	4	20
ST 9	1	1	-	-	-	9	1	12
ST 10	3	7	-	-	1/-	22	27	60
Unit 1	46	125	-	4	-	455	541	1171
Unit 2	15	29	-	-	-	191	-	235
Unit 3	7	27	2	1	1/-	299	6	343
Unit 4	40	136	-	-	2/-	307	233**	718
Unit 5	34	115	-	2	3/-	310	171	635
Unit 6	7	55	-	-	3/-	152	57	274
Unit 6, Fea.	2	5	-	-	-	16	-	23
Unit 7	5	30	-	1	1/-	95	35	167
Unit 8	6	41	-	2	2/1+	178	46	276
Unit 9	7	33	-	1	-/1+	138	31	211
Unit 10	3	58	-	3	-/1	254	78	397
Unit 10, Fea.	1	-	-	-	-	3	-	4
Totals	196	702	3	15	14/3	2625	1220	4778

^{*}DS=decorated sherd; PS=plain sherd; DP=dart point; AP=arrow point; T=chipped stone tool; GS=ground stone; LD=lithic debris; Da/BC=daub/burned clay

Ceramics

The total number of sherds recovered in the investigations at the James Owens site is 898, of which 196 (22%) are decorated (see Table 3). The plain/decorated sherd ratio is 3.58. The 702 plain sherds include 18 bases (principally flat) and 26 plain rims. The highest densities of the sherds are from Units 1, 4, and 5, with between 149-176 sherds per m^2 .

^{**} Includes two pieces of a mud-dauber nest from 20-30 cm bs; +=conjoined pieces of one ground stone celt; Note: the artifact totals do not include fire-cracked rocks (n=35) from Unit 4 (n=16, 189.9 g), Unit 5 (n=14, 336.5 g), Unit 6 (n=4, 65.8 g), and Unit 9 (n=1, 2.1 g)

In the 2002-2003 sample of sherds, 83.6% are tempered with grog. Another 12.8% have bone temper (considerably lower use of this kind of temper than suggested by the analysis of the 2001 sherd sample [Walters et al. 2003:19]), and the remainder (3.6%) have shell tempering. In the larger sample (n=898 sherds) from the James Owens site, 2.9% of the sherds (n=26) are shell-tempered. The shell-tempered sherds include plain sherds (n=9) from Units 4-6, and decorated red-slipped (n=9), neck banded (n=5), appliqued (n=1), punctated (n=1), and engraved (n=1) sherds from ST 10, Unit 1, Unit 4-6, and Unit 10, in the eastern part of the block excavations (see Figure 2).

Vessel forms represented in the sherds include jars with everted or direct rims, bowls, carinated bowls, and a red-slipped and shell-tempered bottle. A heavy sooty coating on the exterior of some of the utility ware sherds indicates the jars were used for cooking food stuffs over an open fire. Overall, the average sherd thickness of a sample of measured sherds is 6.2 mm, with the decorated sherds being from vessels with slightly thinner (6.0 mm) vessel walls.

Firing conditions indicate that 63.8% of the sherds have been fired in a reducing or low oxygen environment (e.g., Teltser 1993). About 57% of these sherds were subsequently cooled in a high oxygen environment, leaving a lighter oxidized band along either one or both vessel surfaces. The proportion of sherds that are from vessels fired in a high oxygen environment is only 18.4%, and 17.8% are from vessels that have been incompletely oxidized during firing, suggesting only adequate control of the firing temperature during vessel production.

Utility wares

The 196 decorated sherds from the James Owens site are dominated by utility wares (70.4%)—decorated cooking and storage jars—with 29.6% of the sherds deriving from fine ware carinated bowls and bottles decorated with either engraved elements or red slipping (Table 4). Of the 37 rims, almost 60% are from vessels with punctated decorative elements. The other principal rim decorations include engraved elements (16.2%), incising (10.8%), and neck banding (8.2%) (Table 4). Overall, punctated rim and body sherds on utility ware jars are the most prevalent decorative element in the ceramic assemblage, followed by engraved rim and body sherds, brushed rim and body sherds (in combination with other decorative methods), and redslipped body sherds.

Horizontal and usually widely-spaced rows of tool punctations, on rims and at rim-body junctures, that are tear-dropped to rectangular-shaped, are the most common form of decoration on the utility wares from the James Owens site (n=33, or 59% of the punctated sherds and 24% of all the utility wares) (see Walters et al. 2003:Figure 3). One of these sherds is from a shell-tempered Emory Punctated-Incised vessel; such vessels are common in McCurtain phase (ca. A.D. 1300-1700) contexts on the middle reaches of the Red River to the north (cf. Perttula 2008). Most of the other tool punctated sherds either have a single tool punctation, a few rows of large tool punctations, or a single row of tool punctations under the vessel lip (see Walters et al. 2003:Figure 3, top row, first and second from left).

Three other punctated sherds from the site, including one rim, have a row of small circular punctations. One punctated sherd from ST 2 has randomly placed half-moon shaped indentations, and another from the 2002-2003 excavations has a row of fingernail punctations (see Walters et al. 2003:Figure 3, bottom row, third from left) below the vessel lip. Absent in the assemblage are punctated sherds with large gouge marks or punch and drag forms.

Table 4. Decorated rim and body sherds from the James Owens site.

Decorative Method	Rim	Body	Totals	Percentage	
Fine ware					
Engraved	6	26	32	16.3	
Red-slipped	-	26	26	13.3	
Subtotal	6	52	58	29.6	
Utility ware					
Appliqued	1	14	15	7.7	
Brushed	-	20	20	10.2	
Brushed-appliqued	-	2	2	1.0	
Brushed-punctated	1	4	5	2.6	
Incised	4	16	20	10.2	
Incised-punctated	-	7	7	3.6	
Neck Banded	3	9	12	6.1	
Neck Banded-appliqued	-	1	1	0.5	
Punctated	22	34	56	28.6	
Subtotal	31	107	138	70.4	
Total	37	159	196	100.0	

The incised sherds include those with cross-hatching on the rim above a horizontal incised panel (see Walters et al. 2003:Figure 4, top row, fifth from left) as well as horizontal and diagonal lines (see Figure 4, top row, third from left). Others have simple cross-hatched elements, parallel or horizontal incised lines, or opposed incised lines.

There were seven sherds with incised-punctated decorations. These have straight or parallel incised lines separating rows of tool punctations. One sherd from the 2002-2003 work has a row of tool punctations that cut across numerous closely-spaced parallel and straight incised lines.

There are 13 neck banded sherds (6.6%), including three rims (Walters et al. 2003:Figure 5, left), in the utility ware assemblage at the James Owens site (see Table 4). One neck banded sherd also has an

appliqued node placed atop one of the neck banded coils. About 42% of the neck-banded sherds are from shell-tempered Nash Neck Banded cooking jars; the non-shell-tempered neck banded sherds may represent an earlier variety of this utility ware type or a locally produced neck banded ware similar to La Rue Neck Banded (cf. Suhm and Jelks 1962:Plate 47).

Appliqued sherds comprise 7.7% of the decorated sherds from the site. Most have straight or vertical appliqued ridges (see Walters et al. 2003:Figure 5, right), including one shell-tempered sherd (probably from a Nash Neck Banded jar), but others formed chevrons that were probably applied to the vessel body, immediately below the rim-body juncture. Two body sherds have straight appliqued fillets (see Walters et al. 2003:Figure 4, top row, fourth from left, and bottom row, first and second from left). Two other sherds, including a rim, have a single small appliqued node decorative element.

Brushed sherds—including those with either associated punctated or appliqued elements—account for 13.8% of the decorated sherds (see Table 4). The brushing varies from faint marks to wider and more evenly spaced marks that cover the vessel surface. The majority of the sherds have parallel brushing marks (one has opposed brushing), but since the sherd orientation is unknown, it is likely that the brushing is primarily oriented vertically on the bodies of cooking jars.

The one brushed-punctated rim has a single horizontal row of punctates below the lip and above horizontal brushed/incised lines (see Walters et al. 2003:Figure 3, top row, first from left). The brushed-punctated body sherds have parallel brushing with a tool punctated row through the brushing; these are probably from Pease Brushed-Incised jars. There are two brushed-appliqued Pease Brushed-Incised sherds that have parallel or vertical brushing marks on the vessel body that have been separated into body panels by either vertical appliqued ridges or fillets.

Fine wares

The engraved sherds from the James Owens site comprise 16.3% of the decorated sherds, but 55% of the fine wares (see Table 4). The engraved sherds are primarily body sherds that have non-descript single straight or multiple parallel lines; two have opposed engraved lines. Of the more distinctive rims, one has a cross-hatched engraved zone defined by upper and lower horizontal engraved lines. Two other rims have horizontal lines on them, including one with a line immediately under the lip, while a third has both horizontal and vertical engraved lines on the rim panel. Another rim sherd has a circular engraved element (see Walters et al. 2003:Figure 4, top row, upper left) on it, possibly part of a cross-in-circle motif.

Three engraved sherds (from Unit 1) have a single horizontal line at the point of the rim carination of carinated bowls, with opposed diagonal lines on the rim panel (see Walters et al. 2003:Figure 4, top row, second from left). Another body sherd has a broad panel filled with hatched engraved lines. The one shell-tempered engraved sherd is from a carinated bowl, and has only diagonal lines on the rim panel.

The other fine wares from the site are red-slipped sherds. There are 26 such red-slipped body sherds in the sherd assemblage; 21 (81%) are red-slipped on both exterior and interior vessel surfaces, and are from bowls and carinated bowls that are apparently otherwise undecorated. Four of these red-slipped sherds are shell-tempered, and are perhaps from a Clement Redware vessel (cf. Flynn 1976). The other five red-slipped sherds are from a bottle (possibly an undecorated portion of an Avery Engraved vessel) with an exterior red-slip; these five sherds are shell-tempered.

Daub and Burned Clay

A total of 1220 pieces of daub and burned clay have been collected from the excavations at the James Owens site. The majority (n=531) are from Unit 1, Unit 4 (n=231), Unit 5 (n=171), and ST 1 (n=76), all in the midden; two pieces of a mud-dauber nest were also recovered from Unit 4 (20-30 cm bs). The distribution of the largest pieces of daub and burned clay (most likely also part of the clay lining of a structure, but lacking plant and stick impressions) in the midden suggests that this part of the midden marks the approximate location of a burned Middle to Late Caddo house structure, as does the clay-lined hearth in Units 5 and 6, just north of the main concentration of daub and burned clay, and the mud-dauber nest. It is also possible that after the structure burned, the house debris was cleaned-up and dumped in the midden. The remainder of the daub from other excavation proveniences consists of small and eroded fragments.

The daub and burned clay from the midden ranged from ca. 3 cm diameter pieces to small, rounded, orange-colored fragments, several of both kinds with grass impressions. There appears to be more sand in the daub material than in the clay used to make the ceramic vessels, and the daub matrix also contains small sandstone fragments which were absent in the paste of the ceramic sherds. Most of the recognizable pieces of daub have one smoothed surface (i.e., the surface of the clay lining that rested against the structure walls) that was either tan or gray in color. A few of the smoothed surfaces are convex, suggesting they were located on the exterior of the dwelling. The other surface (i.e., the outer surface of the daubing) is mostly blackened and has grass/cane impressions, with the grass and cane impressions oriented perpendicular to each other. A few pieces of daub had charred material or impressions sandwiched between two layers of clay, indicating that several layers of clay were applied at once or that there were multiple refurbishing episodes on the structure in this area of the site.

The charred materials and the blackened daub imply that a prehistoric Caddo house burned at the James Owens site in the approximate location of our excavations, and was then either covered with soil, creating a reducing atmosphere, or that the daub itself smothered the fire. The use of daub in Caddo house construction may have been wide-ranging: added as protection against the elements; as protection against fire; or perhaps the clay daub served a decorative function. In Northeast Texas Caddo sites, the use of daub appears to be much more common north of the Sabine River. However, since daub and burned clay is the result of thermal alteration, the location and preservation of daub around a structure must be considered in light of the processes that occur when a structure actually burns (Bankoff and Winter 1979). Why there may have been more archeological evidence of the incidence of structure burning on Caddo structures north of the Sabine River is not known.

Chipped Stone Tools

The 2001-2003 excavations at the James Owens site recovered 34 chipped lithic tools, including 15 arrow points or arrow point fragments, three Gary dart points, 12 expedient flake tools, and two flake scrapers (see Table 3). The highest densities of chipped stone tools (4-5 per unit) are in Units 1, 5, and 8.

More than 93% of the arrow points are made of the local quartzite that had been heat-treated to facilitate knapping; the other was made from a local tan chert. Four are triangular-shaped Maud points, one is a Perdiz or Bassett point, and four are of unidentified stemmed forms. There are also four arrow point blades and two tips.

The four triangular Maud forms are from ST 1, Unit 1 (10-20 cm bs) (see Walters et al. 2003: Figure 6, top row), Unit 5 (0-10 cm bs), and Unit 10 (0-10 cm bs). Such arrow points were commonly made and used after ca. A.D. 1400 in this part of the Sulphur River basin (see Fields et al. 1997; Perttula and Sherman 2008), and they may have continued in use until at least the early part of the 17^{th} century. They range from 14.1-18.8 mm in length, 9.4-11.0 mm in width, and 2.0-3.0 mm in thickness. Their basal concavities are 1.7-2.6 mm in height.

A single quartzite Perdiz or Bassett point fragment, with a narrow contracting stem and straight barbs, was recovered in Unit 8 (10-20 cm bs). The point is at least 16.0 mm in length, 13.0 mm in width, 3.2 mm in thickness, and 3.1 mm in stem width. Perdiz and Bassett points were commonly made and used by Caddo groups after the 15^{th} century A.D.

The tan chert parallel to slightly expanding stemmed and unifacially worked arrow point was found in Unit 1 (10-20 cm bs), and a square-stemmed arrow point with prominent barbs was recovered in Unit 1 between 20-30 cm bs. A third stemmed point (Unit 9, 0-10 cm bs) has an expanding stem, a flat base, and shallow corner notching, while a unifacial but unidentified stemmed fragment was recovered in Unit 8 (20-30 cm bs).

The blades of four other arrow points were found in Unit 1 (20-30 cm bs), Unit 3 (20-30 cm bs), Unit 5 (0-10 cm bs), and Unit 7 (10-20 cm bs). The two arrow point tips are both from Unit 10 (10-30 cm bs).

The contracting stem dart points include a Gary, *var. Camden* specimen from Unit 3 (20-30 cm bs), and two earlier style Gary, *var. Gary* points from ST 2 and Unit 3 (20-30 cm bs), all from the northern part of the site (see Figure 1 and Walters et al. 2003:Figure 6, bottom row, second and third from left); a Yarbrough point has also been reported from the site (see Walters et al. 2003:Figure 6, bottom row. left). The three Gary points and the Yarbrough point were made from local quartzite. According to Schambach (1998), these varieties of contracting stem dart points were made and used during the Woodland period, perhaps between ca. 2800-1250 years ago, and their recovery at the James Owens site suggests it was periodically utilized by Woodland period peoples prior to the more intensive Middle to Late Caddo period settlement. Yarbrough points are thought to be of Late Archaic age (ca. 5000-3000 years old).

The expedient flake tools (n=12) generally have unilateral and unifacial retouched and use-worn areas along the flake edge. There are also tools with graver beaks (Unit 6, 0-10 cm bs and Unit 6, 10-20 cm bs) as well as a perforator (Unit 6, 0-10 cm bs). These flake tools were probably used for the cutting, graving, scraping, and perforating of moderately durable materials, including wood, leather, and green bone. Eleven (92%) of the expedient flake tools are made on local lithic raw materials, including quartzite (75%), red chert (8.3%), and brown-red chert (8.3%). The remaining tool (a distal and lateral retouched flake from Unit 4, 20-30 cm bs) is made from a heat-treated gray novaculite.

Both of the scrapers (Units 4 and 5, 10-20 cm bs) are side scrapers made on large quartzite flakes. One of these tools has a bifacial working edge.

Ground Stone Tools

The ground stone tools from the James Owens site include a fragment of a polished red ochre pigment stone (Unit 10, 0-10 cm bs), and two fragments of a quartzitic sandstone celt. This distinctive material is available in the Ouachita Mountains in southeastern Oklahoma and in Red River gravels below the mouth of the Kiamichi River (Banks 1990). The two conjoined pieces of the celt are from Unit 8 (10-20 cm bs) and Unit 9 (0-10 cm bs).

The celt fragments are from the bit end of the tool. The bit width is 42.0 mm, while the extent of polishing perpendicular to the bit end is 29.0 mm.

Lithic Debris and Cores

There are 2618 pieces of lithic debris and seven cores in the artifact assemblage (see Table 3). The prehistoric occupants of the James Owens site depended heavily on the procurement and use of locally available stone for the manufacture of chipped stone tools. More than 95% of the lithic debris are on the local quartzite (n=2500) that could be procured from stream gravels along White Oak Creek and in upland lag gravels.

About 42% of the local quartzite lithic debris has cortical remnants, usually with a smoothed stream-rolled cortical surface, suggesting that quartzite pebbles and small cobbles were selected for tool manufacture; 43% of the petrified wood pieces (also available in local gravel sources) are cortical. The amount of cortical flakes in the lithic debris assemblage, along with the many non-cortical flakes that range from 0.64-2.54 cm in size, apparently relate to the prehistoric inhabitants bringing the raw materials back to the site as nodules and cores for further reduction, rather than bringing back to the site specifically selected flakes previously detached from cobble or pebble masses.

The seven cores—one from Unit 4, two from Unit 5, one from Unit 8, and three from Unit 10—are on local heat-treated quartzite. Two are small core fragments, three are single platform cores with limited flake removals, one is a multiple platform core, and a core from Unit 5 (10-20 cm bs) has a discoidal shape with flakes being removed from several directions on the pebble. The complete cores range from 42-63 mm in length, 34-47 mm in width, and 23-29 mm in thickness.

As previously mentioned, the lithic debris from the site is overwhelmingly dominated by flakes from local lithic raw materials, particularly quartzite. Petrified wood (n=46, 1.8%) is not abundant. The remaining pieces of local lithic debris are red chert (n=7, 0.3%) and brown/tan chert (n=19, 0.7%); 67% of the red chert lithic debris is cortical, compared to 40% of the brown/tan chert.

Lithic debris from non-local raw material sources at the James Owens site includes novaculite (n=20, 0.8%), chalcedony (n=1, <0.1%), gray chert (n=11, 0.4%), grayish-brown chert (n=2, 0.1%), and dark gray chert (n=4, 0.2%). The lithic debris includes all non-cortical pieces that likely were removed from completed tools during resharpening. The non-local lithic raw materials (or completed tools) could have been gathered from gravel sources or Caddo groups living no closer than the Red River. These materials were probably obtained from Red River gravel sources below the mouth of the Kiamichi River, in Red River County, Texas, about 60 km to the north of the James Owens site. From this lithic raw material data, the use of non-local lithic raw materials during the occupation of the James Owens site was minimal (1.7% of the lithic debris is from a

non-local source). These Caddo and their Woodland period predecessors apparently did not have much in the way of a dependable access to higher-quality lithics and had to rely on difficult to knap quartzite and petrified wood materials.

Paleobotanical Remains

Paleobotanical remains found at the James Owens site primarily consist of charred thick-shelled hickory (*Carya* sp.) nutshells and wood charcoal; these remains have not been analyzed in detail. Most of the remains were found in the midden deposits. The nutshells are probably the product of being boiled in ceramic jars to obtain the oil (Gardner 1997:174), and the wood charcoal represents charred and discarded pieces from the use of gathered wood in hearths and cooking pits.

Animal Bone

A total of 394 pieces of animal bone were recovered from the 2001-2003 investigations at the James Owens site (see Appendix 1). Most of these were recovered from Unit 1, 4, and 5 that had been excavated in the midden deposits at the southern end of the site, in the same area with the highest densities of ceramic sherds and daub/burned clay (see Table 3).

Mussel Shell

The preservation of mussel shell in Northeast Texas prehistoric archeological sites is always a good indication that a site has a well-preserved midden deposit, as appears to be the case at the James Owens site. All told, some 47 pieces of freshwater mussel shell were found in ST 1 (0-50 cm bs), Unit 1 (10-30 cm bs), Unit 4 (0-30 cm bs), Unit 5 (10-30 cm bs), and Unit 6 (0-10 cm bs).

Conclusions

The James Owens site (41TT769) is a multi-component prehistoric archeological site in the White Oak Creek basin of Northeast Texas. Thanks to the permission of the landowner, Mr. James Owens, we were able to conduct over several years archeological investigations at the site, and in the process obtain archeological information on the prehistoric long-term use and settlement of this part of the Post Oak Savannah by ancestral Caddo peoples.

The first use of the site was during the Late Archaic (ca. 5000-3000 years ago) to Woodland period (ca. 2800-1200 years ago). This component on the natural rise, particularly as noted on the northern part of the rise, is marked primarily by discarded Gary and dart points, some fire-cracked rock from the hot rock cooking of plant and animal remains that required prolonged cooking (see Thoms 2009), and a relatively dense deposit of locally-collected lithic debris from the manufacture and maintenance of chipped stone tools.

The principal occupation of the James Owens site, however, took place between the 15th and early 17th century A.D. by prehistoric Caddo peoples. The occupation is marked by a midden deposit, high densities of ceramic sherds and daub/burned clay, as well as lithic debris from the manufacture of arrow points and flake tools, preserved animal bones of deer, turtle, and other species, mussel shells, and plant remains (primarily charred hickory nutshells). The midden apparently represents a trash deposit (ca. 12-30 cm in thickness) that accumulated in, and in the immediate vicinity of, a burned Caddo structure. Features identified in the area of the structure include a basin-shaped and clay-lined hearth, two pits, and a post hole. The density of cooking

jar sherds (the utility ware sherds decorated with brushing, punctation, applique, neck bands, and incised lines), in combination with the estimated size of the midden, indicate that the midden may have accumulated (cf. Varien and Mills 1997) over at least a ca. 20-30 year period by one or more households, portions of which may have been exposed in the 2001-2003 excavations.

The dominance of grog-tempered and bone tempered pottery at the James Owens site, in combination with the predominance of punctated and incised decorative elements, relatively simple geometric elements in the engraved sherds, but with some brushed, brushed-punctated, and appliqued jars—and a relatively abundant amount of red-slipped pottery in the assemblage—suggest social affiliations to other Caddo groups living upstream in the White Oak Creek basin (see Perttula et al. 2009), as well as with other Caddo peoples living north and east (downstream) on the Sulphur River. Sites like the Anglin (41HP240) and Turnier (41HP237) sites on Stouts Creek in the White Oak Creek basin, the Ear Spool site (41TT653) on East Piney Creek in the White Oak Creek basin (Perttula and Sherman 2008), Cheatwood Place (41RR181, see Gaither et al. 1991) on Little Mustang Creek in the Sulphur River basin, Cheatwood Lake (41RR39), 41RR65 on Shawnee Creek (Heartfield, Price, and Greene, Inc. 1982), 41TT670, and 41BW553 (Largent et al. 1997) all have dense midden deposits from sedentary Caddo occupations. Those groups living upstream in the White Oak Creek basin are socially affiliated with Caddo groups known by their archeological nomenclature as belonging to the Titus phase (Perttula et al. 2009). Those Caddo populations living downstream from the James Owens site have not been included in any formally defined archeological taxonomic unit.

These Caddo groups represent what certainly must have been a substantial population of Caddo peoples living in this part of the Post Oak Savannah for at least one century or more immediately preceding initial European contacts in the region in the mid-16th century, and continued to live there at least until the early to mid-1600s, if not later. No Caddo groups were apparently living in this area when the French and Spanish began to explore the area, and leave written accounts of the Caddo groups they encountered, after the late 1680s. The occasional shell-tempered sherd (less than 3% of the James Owens site, but almost 7% of the decorated sherds), from both Nash Neck Banded, Avery Engraved, Emory Punctated-Incised, and possible plain red-slipped vessels, in these Sulphur River and White Oak Creek basin sites point to some sustained contacts with Caddo groups living to the north in the middle reaches of the Red River valley, where fine ware and utility wares of these types comprise a distinctive ceramic assemblage of McCurtain phase sites (see Perttula 2008). These same groups may well have provided the non-local lithic raw materials that are also present on these sites.

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APPENDIX 1, JAMES OWENS SITE (41TT769) FAUNAL ANALYSIS

LeeAnna Schniebs

Introduction

The investigation of James Owens Site (41TT769), a Middle to Late Caddo period site in the northern part of Titus County, Texas, yielded 394 faunal specimens. Total weight of the assemblage is 207.78 grams. Faunal material was recovered from five shovel test pits and eight excavation units. Depths range from zero to 50 cm below surface (bs). I discuss the methods employed in the faunal analysis, the results of taxonomic identification and quantification, and the distribution of these remains in the excavation units.

Methodology

All vertebrate remains were inventoried and weighed. Excel for Windows was used to manipulate the generated data. An Ohaus digital scale, Model CT600-S, was used to record bone weight. All fragments recovered were analyzed using comparative collections on loan from or housed at the Institute of Applied Sciences, Zooarchaeology Laboratory, University of North Texas, Denton, Texas. Occasional supplements were required, using conventional osteological keys such as Olsen (1964), Gilbert (1980), and Schmid (1972). Identifications were made to the most specific category possible depending on condition of the bone and available comparative material. Only positive identifications resulted in the assignment of elements to genus or species.

The animal bones from the site were inventoried and bagged by Archeological & Environmental Consultants, LLC, then submitted for identification and quantification. Both unidentifiable and identifiable pieces were analyzed in a similar fashion. That is, the same attributes were recorded: taxon, element and portion of that element, anatomical location of the element, condition of the bone and any notes on age, taphonomy, burning or breakage patterns, and presence of modification if applicable. Provenience information was also recorded.

Quantification of the assemblage is summarized as number of identified specimens per taxon (NISP) and as minimum number of individuals (MNI) for identified elements. MNI estimates were calculated according to the most frequently occurring element, based on symmetry and element portion (Munzel 1986). In some cases, complete long bones and proximal or distal ends were considered. In other cases, the presence of a single element constituted an MNI of one.

The faunal data tables are standard species lists with the number of occurrences for each animal. Those specimens regarded as unidentifiable (those coded to only class or order) have been consolidated into a few general categories. Elements of non-diagnostic skeletal value (ribs, vertebrae, and long bone shafts; Olsen 1964), are coded in an indeterminate category by class and/or size range. Specifically, specimens counted as "unidentifiable mammal" are of indeterminate size, "small mammal" is gopher or rabbit-size, "medium mammal" includes dog or sheep-size animals, and "large mammal" refers to a deer-size mammal. "Indeterminate vertebrate" includes the bones uncertain of class. Recording these specimens in a size category enables the most precise level of observation as the specimen allows. In small samples, taking note of weight

and the size categories of non-diagnostic elements broadens the function of the bone assemblage. However, percentages referred to in this report are calculated by number of bones (NISP) rather than weight. Weights of specimens by unit number can be found in Table A1. (All Tables are on a CD, see inside of back cover.)

Results

The following section describes the vertebrate taxa recovered from the James Owens site. Taxonomic classes identified include fish, reptile, and mammal (marsupialia, lagomorpha, carnivora, and artiodactyla). The faunal assemblage is dominated by unidentifiable large mammal remains. Number of identified specimens (NISP) and minimum number of individuals (MNI) for each taxon are summarized in Table A2, as are weights for each taxon and percentages of site assemblage. Composition of anatomical elements can be found in Table A3.

Assemblage Composition

Class Osteichthyes

Order indeterminate

Four small cranial fragments from unidentifiable small-sized bony fish are present in the James Owens faunal collection. Fragmentation prevented specific identification. Two burned specimens were recovered from a flotation sample taken in Level 2 (10-20 cm bs) of Unit 1. Two levels (10-20 cm bs and 20-30 cm bs) in Unit 4 yielded the other two specimens; these pieces are not burned. The presence of fish remains in the collection is not unusual. Fish were used extensively by the Caddo Indians, with no known limitations on variety or size (Newcomb 1993). They were caught in several ways, employing trotlines: short lines were hung about a foot apart from a long line with hooks on each end baited with "dough bait" or meat. The line can be checked several times a day, yielding good-sized fish. The method is almost identical to the one used today.

Order Testudinata, Family Emydidae

Box turtle (*Terrapene* sp.) is represented by 20 shell fragments from one shovel test pit and three units. One fragment was recovered from ST 1 at 40-50 cm bs, and two levels in Unit 1 yielded seven fragments. Six pieces were recovered from two levels in Unit 4, and two levels in Unit 5 yielded another six fragments. The six pieces from Level 2 (10-20 cm bs) in Unit 1 are burned, as are two fragments from Level 3 (20-30 cm bs) in Unit 4. Box turtles, which are strictly North American, range widely over the eastern and central United States and into the Southwest, and they also occur in many parts of Mexico. These are dry-land turtles that close their shells tightly when danger threatens (Conant 1975).

Order Testudinata (family indeterminate)

A total of 64 shell fragments from unidentifiable turtle are included in the James Owens faunal collection. One specimen was found in Shovel Test 1 at 20-40 cm bs. Twenty one turtle shell fragments were recovered from the three levels in Unit 1, and the majority came from the second level (10-20 cm bs, n=13). Three levels in Unit 4 yielded 28 specimens, and 11 fragments were recovered from two levels in Unit 5. Thirty seven pieces are burned.

Class Mammalia

Order Marsupialia, Family Didelphidae

Virginia opossum (Didelphis virginiana) is represented by one element. A maxilla fragment with three teeth in socket was recovered from Unit 4 (20-30 cm bs). The specimen is not burned. According to Burt and Grossengeider (1980), the opossum is the only marsupial in North America. It is found in woodlands and along streams throughout most of the eastern half of the country, south into Mexico, and along the Pacific coast.

Order Lagomorpha, Family Leporidae

Cottontail rabbit (Silvilagus sp.) is represented by a single specimen, recovered from Unit 4 (20-30 cm bs). Currently, two species of cottontail inhabit this part of Northeast Texas: the Eastern cottontail (S. floridanus) prefers heavy brush, strips of forest with open areas, edges of swamps, and weed patches; swamp rabbit (S. aquaticus) prefers swamps, marshes, and wet bottomlands (Burt and Grossenheider 1980). Osteologically, the swamp rabbit is the largest of the cottontails within its range (Davis 1978). Based on fragmentary remains, a specific identification was not recorded.

Order Carnivora, Family Procyonidae

Raccoon (*Procyon lotor*) is represented by a single lower molar, recovered from Unit 4 (20-30 cm bs). The specimen is not burned. The range of the raccoon covers most of the country, including the White Oak Creek basin. The preferred habitats are streams and lake borders near wooded areas or rock cliffs (Burt and Grossenheider 1980). Raccoons seldom occur far from water, which seems to have more influence on their distribution than does any particular type of vegetation (Davis 1978).

Order Artiodactyl, Family Cervidae

Deer (Odocoileus sp.) is represented by one specimen recovered from a flotation sample taken in the first level (0-10 cm bs) of Unit 1. This tooth fragment is charred. Whitetail deer (Odocoileus virginianus) is the only species in Family Cervidae that currently occupies the area, found in forests, swamps, and open brushy areas (Burt and Grossenheider 1980). In Texas, whitetail deer prefer suitable brushy or wooded country throughout the state (Davis 1978).

Medium-sized artiodactyl is represented by 35 specimens. One metapodial fragment was found in Shovel Test 2. Three levels in Unit 1 yielded five leg bone fragments, including one fragment from a flotation sample taken in the first level (0-10 cm bs). Twenty-one elements were recovered from three levels in Unit 4, and seven fragments came from two levels in Unit 5. One element was found in Unit 9 (10-20 cm bs). Fourteen pieces are burned. These are most likely the remains of deer rather than pronghorn (Antilocapra americana). Both are similar in size, but pronghorn antelope are found in open prairies and sagebrush plains well outside of the White Oak Creek basin (Burt and Grossenheider 1980). The two are osteologically similar, but specific identification was not recorded because of fragmentation. Pronghorn currently reside in the western half of Texas from the Panhandle to the lower Rio Grande valley (Davis 1978). However, one pronghorn element was recovered from the Hurricane Hill site (41HP106), a Caddo habitation site at Cooper Reservoir in nearby Hopkins County (Yates 1999). Henderson (1978) reported pronghorn remains at the Arnold and Luna sites at Cooper Lake (see also Shaffer et al. 1995).

In addition to this quantity, artiodactyl is probably represented in the unidentifiable large mammal category (n=174). The large mammal and medium artiodactyl samples consist entirely of unidentifiable fragments, lower limb bones, and a few vertebral fragments ("non-meat items"). One hundred twenty five large mammal bones are burned, 32% of the site assemblage.

Family Cervidae is also represented by 11 burned antler fragments. They were recovered from Units 4, 5, 7, and 10.

Assemblage Condition

The James Owens site faunal collection is highly fragmented, explaining the low identifiability rate. Taphonomic patterns are absent on 303 specimens (Table A4), 77% of the entire site sample. Abrasion and/or exfoliation are visible on 88 fragments, and three pieces are root etched. A total of 249 specimens are burned, probably the result of trash disposal activities (Table A5), and the distribution of these burned remains can be found in Table A6. A majority of faunal remains were recovered from flotation samples taken in three levels in Unit 1 (Table A7). Flotation samples yielded 78 very small fragments, 21% of the site collection (Table A8).

Two specimens are modified. An unidentifiable tool fragment made from a medium artiodactyl metapodial shaft was recovered from Unit 4 (20-30 cm bs). A medium artiodactyl femur fragment found in Unit 5 (10-20 cm bs) may have been chopped during butchering.

The condition of the bone, and the degree of fragmentation, suggests that at least some of it was boiled, possibly for bone grease processing. The bones are broken into small pieces and boiled in water. The floating fat is then skimmed from the top of the pot. The substance is used for frying and other culinary purposes. This practice has been well documented over time, and is a method used by many different cultures (Leechman 1951).

Distribution

Distribution of faunal remains by area is summarized in Table A9. Specific recovery by unit and level can be found in Table A10.

Shovel Test 1 (Midden Area)

Three levels in ST 1 yielded a total of 13 faunal specimens. The sample is dominated by large mammal remains, recovered from 0-20 cm bs (n=7). Three large mammal bone fragments, one indeterminate mammal bone fragment, and one piece of unidentifiable turtle shell were found in the second level (20-40 cm bs). One box turtle shell fragment came from the third level (40-50 cm bs). Nine specimens are burned.

Shovel Test 2

Only one faunal specimen was recovered from ST 2. This medium artiodactyl bone fragment is burned.

Shovel Test 7

One faunal specimen was recovered from ST 7, at 0-20 cm bs. This unidentifiable fragment from a large mammal is not burned, but it is abraded.

Shovel Test 9

One long bone fragment from unidentifiable large mammal came from ST 9 (0-20 cm bs). Abrasion and exfoliation are noted. The specimen is not burned.

Shovel Test 10 (Midden Area)

ST 10 yielded six large mammal bone fragments. Four pieces came from 0-10 cm bs, and two pieces came from 20-50 cm bs. Five specimens are burned.

Unit 1 (Midden Area)

A total of 153 faunal specimens were recovered from three levels in Unit 1, and just over 51% came from flotation samples (n=78). Depths range from 0-30 cm bs, and Level 2 (10-20 cm bs) yielded the majority of the fauna (n=86). The sample is dominated by large mammal bone fragments (n=60), but also includes indeterminate vertebrate, unidentifiable fish, turtles, unidentifiable mammal, medium artiodactyl, and deer remains. One hundred twenty-seven fragments are burned.

Unit 4 (Midden Area)

Three levels in Unit 4 yielded 122 bone fragments. This diverse sample is comprised of indeterminate vertebrate, unidentifiable fish, turtles, unidentifiable small, medium, and large mammal, opossum, cottontail, raccoon, medium artiodactyl, and antler fragments. Fourteen specimens were found in Level 1 (0-10 cm bs), and 57 fragments came from Level 2 (10-20 cm bs). Fifty one pieces were recovered from Level 3 (20-30 cm bs), including the opossum, cottontail, and raccoon remains and the unidentifiable tool fragment. Fifty-nine specimens from Unit 4 are burned.

Unit 5 (Midden Area)

Three levels in Unit 5 had 69 faunal specimens. Large mammal and turtle remains dominate the sample; indeterminate vertebrate, unidentifiable mammal, medium mammal, medium artiodactyl, and antler fragments were also recovered. Eight bone fragments came from Level 1 (0-10 cm bs), and 45 specimens were found in Level 2 (10-20 cm bs), including the butchered bone fragment. Level 3 (20-30 cm bs) yielded 16 pieces. Twenty-eight fragments are burned.

Unit 6 (Midden Area)

Eleven faunal specimens were recovered from Unit 6. Three unidentifiable large mammal fragments came from Level 1 (0-10 cm bs), and Level 2 (10-20 cm bs) yielded one indeterminate vertebrate bone, one medium mammal bone, and three large mammal bones. Two medium mammal bones and one large mammal bone were recovered in Level 3 (20-30 cm bs). Seven fragments are burned.

Unit 7 (Midden Area)

Only two faunal specimens were recovered from Unit 7, and both pieces are burned. A large mammal long bone fragment and an antler fragment came from Level 2 (10-20 cm bs).

Unit 8 (Midden Area)

Unit 8 yielded four unidentifiable large mammal bone fragments. These burned specimens were found in Level 2 (10-20 cm bs).

Unit 9 (Midden Area)

Six faunal specimens were recovered from two levels in Unit 9. Two large mammal long bone fragments came from Level 1 (0-10 cm bs). Level 2 (10-20 cm bs) yielded one medium artiodactyl element and three unidentifiable large mammal bones. The five large mammal bone fragments are burned.

Unit 10 (Midden Area)

Five faunal specimens were found in two levels in Unit 10. Two burned antler fragments and one unidentifiable large mammal bone were found in Level 1 (0-10 cm bs), and two unidentifiable large mammal bone fragments came from Level 2 (10-20 cm bs).

Summary

Three levels in eight units in the midden area at the James Owens site (41TT769) yielded faunal material, as did five shovel tests, and Unit 1 had the highest recovery (n=153). Across the site, Level 2 (10-20 cm bs) consistently had the highest densities of faunal remains.

The faunal collection from the James Owens site gives further evidence to the fact that the prehistoric Caddo peoples living in this part of Northeast Texas supplemented their diet with large and small game animals, including deer, rabbit, turtle, and fish. The opossum and raccoon remains may have also served other purposes, such as procurement of their hides. The Caddo undoubtedly exploited the rich resources of the region, and the faunal sample from the James Owens site demonstrates the potential for further investigations to yield additional information on prehistoric Caddo subsistence practices.

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REDWINE OR PIE-CRUST MODE FORMS IN EAST TEXAS CADDO CERAMICS AND COMPARISONS WITH SPROCKET-RIMS OF SOUTHWEST ARKANSAS

Mark Walters with contributions by Tom Middlebrook and Timothy K. Perttula

Introduction

Caddo ceramics served many purposes, including cooking, storage, and the serving of foods and liquids. The various forms and shapes of these vessels were subject to the ideas of the potters themselves and the larger community of which they were a part. Products of human behavior reflect conscious and predictable actions that can be identified and measured in time and space. Artifacts are "embodiments of human behavior" (White 1959:232-233).

The various elements that make up an artifact are termed attributes. Certain attributes that reflect customary usage or current fashion are termed nodes. Irving Rouse describes a mode as "any standard, concept, or custom which governs the behavior of the artisans of a community, which they hand down from generation to generation over considerable distances" (Rouse 1960:109). The particular artifact that is the main focus of consideration in this article is a unique prehistoric Caddo ceramic rim mode defined as the Redwine or "pie-crust" mode. We also discuss the related Myers mode or "sprocket-rim" that is another particular form of rim identified in prehistoric Caddo sites.

We examine specific Caddo ceramic vessels from East Texas sites, almost all of which date to the Middle Caddo period (ca. A.D. 1200-1400), and in particular one unique attribute found on those vessels, to hopefully better understand prehistoric Caddo communities and their interaction. The Middle Caddo period in East Texas was dynamic in terms of the artistic ceramic artifacts characteristic of the period. Different but contemporaneous groups were experimenting with new forms of ceramic vessels as well as how they chose to decorate their vessels, as exemplified by the appearance of the engraved canebrake rattlesnake motif on fine ware vessels (Walters 2006:5-40). These vessel forms and designs became established patterns and through contact and interaction, movement of people, and/or the sharing and adoption of ideas, they spread to other groups. In the study of Caddo archeology, we are very fortunate that the Caddo potters left an extensive ceramic record that is very rich in its stylistic diversity. By studying the ties between different but contemporaneous groups of people through the similarities and differences in ceramic styles, attributes, modes, and techniques, we can arrive at a better understanding of how these diverse groups interacted with each other. It is becoming increasingly evident that ceramic vessels were widely traded amongst widelyspaced Caddo groups, and that some kinds of ceramic vessels (such as the Redwine mode vessels or other distinctive forms) were an important indication of the existence of exchange relationships, or special bonds and alliances, between groups.

Definition of the Redwine or Pie-crust and Myers Mode Rims

The Redwine and Myers modes refer to the portion of a vessel designated as the rim or edge, border, or margin of the mouth or orifice of a vessel. The orifice is one of the three essential components, along with the base and body, of a ceramic vessel (Rice (1987:212-214). The orifice, or mouth opening, may be described in terms of two secondary form characteristics, the lip and the rim. The lip is described as the edge or margin of the orifice that is also the edge of the rim of a vessel, and as such is a part of the rim (e.g., a direct rim with a rounded lip). The rim is defined as "the area between the change of orientation of the lip (or margin) and the side or neck of the vessel" (Rice 1987:212-214; e.g., as with a carinated bowl). In certain vessel forms the distinction between the two is difficult to define, as in the case of a simple bowl with a direct rim.

The Redwine or pie-crust rim mode as a distinct form of rim treatment was first noted in the ceramics from the Redwine site (41SM193). Redwine is a Middle Caddo period habitation and mound site located in eastern Smith County, Texas (Walters and Haskins 1998).

The term "pie-crust" occurs earlier in the Caddo archeological literature in the Standridge site report (Early 1988:72), wherein Ann Early mentioned rims that had a "deeply notched piecrust-shaped lip." In an April, 2008, personal communication to Mark Walters, she stated that these particular rims were undulating and had lip notches, and the lip orientation was both vertical or conformable with the rim and projected horizontally. These Standridge site rims are different from rims with the Redwine rim mode.

What distinguishes the Redwine rim mode form as defined in this article is the rim's acute angle or change in orientation from the side of the vessel (Figure 1). It is this degree of articulation on certain vessels, almost all of them dating to the Middle Caddo period, that is so uncommon in other Caddo vessel forms. The Redwine mode of rim construction is unique in East Texas Caddo pottery as well as all of the Caddo area.

Most of the Redwine mode rims are at abrupt right angles to the vessel wall, although there are a few examples of angles that are both more and less than 90 degrees. The Redwine mode rims all have evenly spaced scalloped lobes (Figure 2), edges or lips, as the case may be. These differ from the triangular-shaped cogs or sprockets on the Myers mode rims that form an undulating, wave-like appearance (Figure 3).

The Myers mode rim form was identified on certain Myers Engraved vessels, a new pottery type identified during analysis of ceramics from the Middle Caddo Myers site (3M139) in southwestern Arkansas. John Miller (1986:97) described the rim treatment as: "cogged or sprocketed lips or rims which consisted of a series of triangular cogs which radiate outward at almost right angles to the rim." In certain instances, the short arm of the triangles appear to have cut edges to shape them, probably done when the vessel was in a leather-hard stage prior to firing.

The Redwine mode is primarily found on vessels from two small clusters of sites in East Texas (Figure 4). The largest cluster, consisting of 10 sites, is centered in the upper reaches of the Sabine River basin, primarily on the southern side of the basin. A smaller cluster of five sites with Redwine mode vessels is located in the Angelina River basin, centered on the Washington Square Mound site (41NA49) in the city of Nacogdoches, Texas. Vessels with the Myers rim mode are restricted mainly to a small number of sites in southwestern Arkansas (Figure 5), but examples are known from a few sites in East Texas (see below).

The distinction between the rounding and scalloped lobes of the Redwine mode and the undulations of the Myers' mode is definitive, and there are no known examples of both forms of rim treatment existing on a single vessel; there is one instance discussed below where examples of both forms of vessels occur in a single grave. The differences between these two modes was evidently a ceramic practice that Caddo potters went to great pains to keep separate.

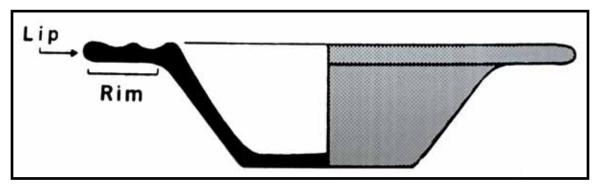


Figure 1. Example of articulated rim (Rice 1987:214 and Figure 7.3b).



Figure 2. Redwine mode "pie-crust" rim.

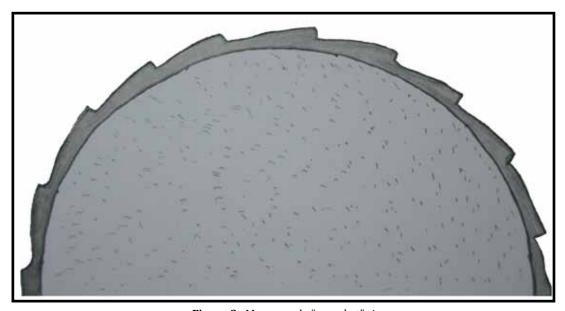


Figure 3. Myers mode "sprocket" rim.

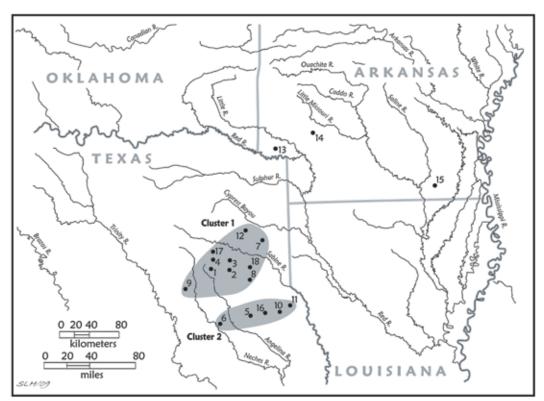


Figure 4. Distribution map of Redwine mode rim examples.

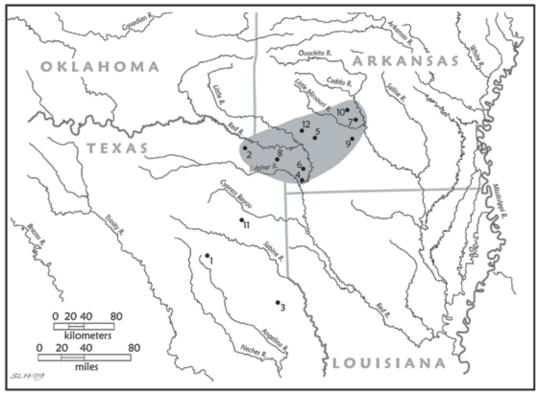


Figure 5. Distribution map of Myers mode rim examples.

Examples of the Redwine rim mode on ceramic vessels from East Texas Caddo sites:

Table 1 lists known vessels with rim treatments that compare favorably with the Redwine mode rim. There are not many examples from any one site, and the numbers represented may have been skewed by the amount of archeological work done at any one site, or by the level of detail provided in published reports of particular vessels. If a Redwine rim mode vessel was available for study, a detailed form has been completed that provides various relevant attributes about the vessel, its form, size, temper/paste, firing conditions, wall thickness, and decoration.

Table 1. Sites with Redwine mode rims and number of known examples.

Site	No.	Site	No.
41CE19	10	41SM196	1
41SY45	10	41HS718	1
3LR46/50	9	41RK276	1
41NA49	4	41SY41	1
41SM193	4	3HE35	1
41SM325	3	3SA154	1
41UR315	3	41NA231	1
41SM223	2	41SM198	1
41AN38	2	*Fields site	1
GC 108**	1		

^{*}Not plotted; **no trinomial

Cluster 1 Sites

We have identified 19 sites across the Caddo area where there are vessels with the Redwine mode rim. These sites are discussed in the order of their spatial association with one another (see Figure 4), the presumption being that the closer different sites are located to one other, the more likely they are to be culturally associated. There are few absolute dates for these sites, but they apparently date to the Middle Caddo (A.D. 1200-1400) period.

Cluster 1, including the Redwine site, is the largest concentration of sites with vessels exhibiting the Redwine mode. Cluster 1 is comprised of eight sites in the upper reaches of the Sabine River drainage, one site (41AN38) on the Neches River, and one site (41UR315) in the Cypress Basin. Seven of the Sabine River sites occur on the south side of the Sabine River, on small neighboring drainages, and one site in Cluster 1 is located on the north side of the Sabine River.

Redwine (41SM193)

The Redwine site is a mid- 14^{th} century Middle Caddo habitation site with a single mound that covered a burned structure with an extended entrance (Walters and Haskins 1998). The Redwine mode rim is present on two whole vessels and two rim sherds from other vessels.

Vessel 1 (Walters and Haskins 1998:Figure 11i) (Figure 6)

VESSEL FORM: Bowl with a Redwine mode rim. The angle of articulation is greater than 90 degrees and the rim in profile actually hangs down. The lip is scalloped, forming 17 rounded lobes that average 11.0 mm in thickness.

NON-PLASTICS: Grog and hematite

CORE COLOR: F (reduced firing but cooled in the open air)
INTERIOR SURFACE COLOR: dark yellowish-brown (10YR3/6)
EXTERIOR SURFACE COLOR: dark yellowish-brown (10YR3/6)

WALL THICKNESS: 5.4 mm

INTERIOR SURFACE TREATMENT: Smoothed EXTERIOR SURFACE TREATMENT: Burnished

HEIGHT: 7.5 cm

ORIFICE DIAMETER: 20.5 cm BASE DIAMETER: 9.1 cm

DECORATION: Engraved line circles the top of the articulated rim with cross-hatched engraved pendant

triangles on the rim that are centered on top of each lobe. There is red pigment in the engraved lines.

TYPE: Untyped



Figure 6. Bowl from the Redwine site (41SM193) with Redwine mode rim.

Vessel 2 (Walters and Haskins 1998:Figure 11c) (Figure 7)

VESSEL FORM: Jar with the upper rim folded out at a right angle; the undulating lip has 10 rounded lobes.

There are two strap handles on opposite sides of the rim. The rim has four evenly spaced peaks.

NON-PLASTICS: Grog

CORE COLOR: B (reduced firing and cooling)
EXTERIOR SURFACE COLOR: black (10YR2/1)
INTERIOR SURFACE COLOR: black (10YR2/1)

WALL THICKNESS: Not available

INTERIOR SURFACE TREATMENT: Smoothed and burnished near the top

EXTERIOR SURFACE TREATMENT: Burnished

HEIGHT: 7.0 cm

ORIFICE DIAMETER: 7.5 cm BASE DIAMETER: 6.0 cm

DECORATION: Engraved and excised scrolls and concentric circles on the vessel body of the vessel and on the strap handles. The rim is decorated with rectangular panels outlined by punctates and filled with parallel brushing. There is white pigment in the engraved lines.

TYPE: Washington Square Paneled or Nacogdoches Engraved, *var. Redwine*. This variety of Nacogdoches Engraved is newly defined in the region.



Figure 7. Jar with Redwine mode rim from the Redwine site.

Rim Sherd 1, surface

VESSEL FORM: Bowl (similar to Vessel 1) with a Redwine mode rim. The rim sherd has a single lobe that is

10.0 mm thick.

NON-PLASTICS: Grog and hematite

CORE COLOR: F (reduced firing but cooled in the open air)

INTERIOR SURFACE COLOR: brown (7.5YR4/4) EXTERIOR SURFACE COLOR: brown (7.5YR4/2)

WALL THICKNESS: 5.7 mm

INTERIOR SURFACE TREATMENT: Burnished EXTERIOR SURFACE TREATMENT: Burnished DECORATION: None (but the surface is eroded)

Rim Sherd 2, surface (Figure 8)

VESSEL FORM: Bowl (similar to Vessel 1) with a Redwine mode rim. The rim sherd has two lobes that average

11.5 mm in thickness.

NON-PLASTICS: Grog and hematite

CORE COLOR: B (reduced)

INTERIOR SURFACE COLOR: brown (7.5YR4/3) EXTERIOR SURFACE COLOR: brown (7.5YR5/4)

WALL THICKNESS: 5.0 mm

INTERIOR SURFACE TREATMENT: Burnished EXTERIOR SURFACE TREATMENT: Burnished

DECORATION: Engraved concentric semi-circles with hatched marks on the top of each lobe. There is a red

pigment in the engraved lines.

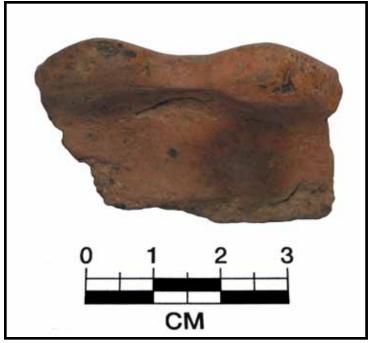


Figure 8. Redwine mode rim sherd from the Redwine site.

41SM223

41SM223 is 3 miles from the Redwine site and is in the same drainage. There are no radiocarbon dates from this site, but the range of artifacts recovered from three burials excavated here indicates that these interments occurred in Middle Caddo times. The two vessels from Burial 1 exhibit two different varieties of the Redwine mode (see discussion below). This combination also occurred in the same burial at Redwine, demonstrating that the Redwine mode could be executed in different ways at the same time and place. In addition to the two Redwine mode vessels, Burial 1 also contained a Pease Brushed-Incised jar and a small bottle with engraved concentric circles on the body. A smoothing pebble such as was used in pottery production was located at the right shoulder of the deceased individual.

Burial 1, Vessel 1 (Figure 9)

VESSEL FORM: Carinated bowl; the Redwine mode rim has 18 evenly spaced lobes that are at right angles to the wall of the vessel. The lobes average 6.5 mm in thickness and extend outward 17 mm from the mouth of the vessel. There are also two opposing strap handles on the rim.

NON-PLASTICS: Grog

CORE COLOR: B (fired and cooled in a reducing environment)

WALL THICKNESS: 5.7 mm

INTERIOR SURFACE COLOR: black (10YR2/1) EXTERIOR SURFACE COLOR: black (10YR2/1) INTERIOR SURFACE TREATMENT: Burnished EXTERIOR SURFACE TREATMENT: Polished

HEIGHT: 5.5 cm

ORIFICE DIAMETER: 10.5 cm BASE DIAMETER: 4.4 cm

DECORATION: Engraved scrolls similar to Hart's Nacogdoches Engraved Mode 3 (Hart 1982:47 and Figure 3-4) with cross-hatched fill elements. There are engraved circles inside cross elements on both of the strap handles.



Figure 9. Carinated bowl with Redwine mode rim from 41SM223, Burial 1, Vessel 1.

Burial 1, Vessel 2 (Figure 10)

VESSEL FORM: Carinated bowl with evenly spaced lobes articulated at a greater than 90 degree angle from

the body of the vessel.

NON-PLASTICS: Grog, hematite, and heavy bone

CORE COLOR: G (reduced firing and cooled in open air)

INTERIOR SURFACE COLOR: brown (7.5YR4/3)

EXTERIOR SURFACE COLOR: reddish-yellow (7.5YR6/6)

INTERIOR SURFACE TREATMENT: smoothed but badly eroded EXTERIOR SURFACE TREATMENT: burnished but badly eroded

HEIGHT: 9.5 cm

ORIFICE DIAMETER: 18.5 cm BASE DIAMETER: 6.5 cm

DECORATION: Three horizontal rows of tool punctates on the rim joined by punctated columns, forming

rectangular interlocking panels.

TYPE: Washington Square Paneled -(Hart 1982:71-75).



Figure 10. Carinated bowl with Redwine mode rim from 41SM223, Burial 1, Vessel 2.

The Pardee Site (41SM198)

This Caddo site is located near the Redwine site and 41SM223 on the headwaters of Auburn Creek in eastern Smith County, Texas. All three sites have Middle Caddo occupations and examples of Redwine mode rims. The example from the Pardee site is from a carinated bowl with a Washington Square Paneled design (Figure 11).

VESSEL NO.: Burial 1 NON-PLASTICS: grog

VESSEL FORM: carinated bowl with Redwine mode rim

RIM AND LIP FORM: direct, rounding

CORE COLOR: A (oxidized)

INTERIOR SURFACE COLOR: strong brown (7.5YR5/6) EXTERIOR SURFACE COLOR: strong brown (7.5YR5/6) WALL THICKNESS (RIM, BODY, AND BASE IN MM): 5.7 rim

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT (IN CM): 8.6

ORIFICE DIAMETER (IN CM): 19.0

DIAMETER AT BOTTOM OF RIM OR NECK (IN CM): 16.5

BASE DIAMETER (IN CM): 8.6

ESTIMATED VOLUME (IN LITERS): 0.98 liters

DECORATION: bands of tool punctates within incised panels

TYPE: Washington Square Paneled



Figure 11. Washington Square Paneled carinated bowl with Redwine mode rim from 41SM198.

Leaning Rock (41SM325)

Leaning Rock is a Caddo habitation area with calibrated dates ranging from AD 1280-1420. (The average calibrated radiocarbon intercept date is cal AD 1349 (Walters 2008). Three sherds with Redwine mode rims were recovered from excavations in a midden area.

Sherd 1, Unit 4, 30-40 cm bs (Walters 2008:Figure 20a) (Figure 12)

VESSEL FORM: Probably from a large carinated bowl. The sherd has a 90 degree folded rim with two rounded lobes that are 11.6 mm in thickness. The supporting vessel wall is 7.6 mm thick. The upper surface of the lobes is flattened but undecorated.

NON-PLASTICS: Grog and bone

CORE COLOR: F (reduced firing and cooled in the open air)

INTERIOR SURFACE COLOR: brown (10YR4/3)

EXTERIOR SURFACE COLOR: dark grayish-brown (10YR3/2)

INTERIOR SURFACE TREATMENT: Burnished EXTERIOR SURFACE TREATMENT: Burnished

DECORATION: The rim has vertical and curvilinear zones of incised lines and there is a row of linear punctates

underneath the lobes.

TYPE: Washington Square Paneled



Figure 12. Redwine mode rim sherd from the Leaning Rock site, Unit 9, 20-30 cm bs.

Sherd 2, Unit 11, 20-30 cm bs (Walters 2008:Figure 20b) (Figure 13)

VESSEL FORM: Large carinated bowl. The rim has two lobes, and it is at right angles to the vessel wall. The lobes are flattened but not decorated on the upper surface. The lobes are 10.9 mm thick, compared to 7.7 mm thickness for the vessel wall.

NON-PLASTICS: Grog, bone, and hematite

CORE COLOR: F (reduced firing and cooled in the open air)

INTERIOR SURFACE COLOR: brown (7.5YR4/3)

EXTERIOR SURFACE COLOR: dark grayish-brown (10YR3/2)

INTERIOR SURFACE TREATMENT: Burnished EXTERIOR SURFACE TREATMENT: Burnished

 $DECORATION: The \ rim\ has\ vertical\ and\ curvilinear\ zones\ of\ incised\ lines\ and\ there\ is\ a\ row\ of\ linear\ punctates$

underneath the lobes.

TYPE: Washington Square Paneled



Figure 13. Rim sherd with Redwine mode rim from the Leaning Rock site (41SM325), Unit 4, 30-40 cm bs.

Sherd 3, Unit 9, 20-30 cm bs (Walters 2008:Figure 20c) (Figure 14)

VESSEL FORM: Probably a large carinated bowl with a rim that is flattened on the top, but it has undecorated lobes that radiate out from the rim at a right angle. The lobe is 9.8 mm thick compared to the 7.2 mm thick vessel wall. On this example, the lobes are not as pronounced as the other two from the site.

NON-PLASTICS: Grog

CORE COLOR: B (reduced firing and cooling)

INTERIOR SURFACE COLOR: yellowish-brown (10YR5/4); fire clouding EXTERIOR SURFACE COLOR: dark grayish-brown (10YR3/2); fire clouding

INTERIOR SURFACE TREATMENT: Burnished EXTERIOR SURFACE TREATMENT: Burnished

 $\label{lem:decoration:percord} DECORATION: The \ rim\ has\ horizontal\ incised\ scrolls\ and\ incised\ columns\ (interlocking\ scrolls?),\ with\ a\ row$

of punctates underneath the lobes. TYPE: Washington Square Paneled



Figure 14. Rim sherd with Redwine mode rim from the Leaning Rock site, Unit 11, 20-30 cm bs.

Brooks Site (41SM196)

The Brooks site is on a neighboring small drainage from the Leaning Rock site and ca. 8 miles from Redwine. Although not radiocarbon-dated, the prehistoric Caddo occupation appears to date to the Middle Caddo period based on the presence of Perdiz arrow points, brushed pottery, and certain engraved elements on vessels, such as ladders. There is one rim sherd from the surface that has a Redwine mode rim. It is badly eroded, with a portion of the lobe is missing, but the top is folded out at a radical angle from the wall of the vessel (5.7 mm thick), forming a lobe that is 8.2 mm thick. The angle of the vessel wall suggests a simple bowl form similar to Vessel 1 from the Redwine site. The temper is grog and bone and the sherd has a sandy paste. There is a single horizontal line under the lip that cannot be identified as either engraved or incised due to its eroded condition. The vessel appears to have been fired in an oxidizing atmosphere.

41RK276

Sherd 1 (Sherman et al. 2001:108)

During test excavations in the Martin Creek drainage in the Sabine River basin, at the Oak Hill Mine, a possible Washington Square Paneled rim sherd with a Redwine rim mode was recovered and documented (Sherman et al. 2001:108). This site dates to the Middle Caddo period.

The grog-tempered sherd closely resembles Redwine mode sherds from the Leaning Rock site (41SM325). The articulated portion on this sherd has a row of finely executed punctates on the underside of the lobes.

41HS718

Sherd 1 (Gadus et al. 2006:Figure 4-40, Vessel 1), 41HS718 (Figure 15)

Test excavations at 41HS718 recovered a vessel with a Redwine mode rim (Gadus et al. 2006:82-83). This grog-tempered vessel was found in a Middle Caddo period burial (Gadus et al. 2006:91). Although identified as Glassell Engraved by Gadus et al. (2006), the rectangular panel design, formed by punctates, more closely resembles the decorative elements seen on Washington Square Paneled vessels (Hart 1982). In profile, the rim is folded out at a right angle from the vessel body and the lip has evenly spaced lobes, thus closely resembling Redwine mode rims from other sites in the area.

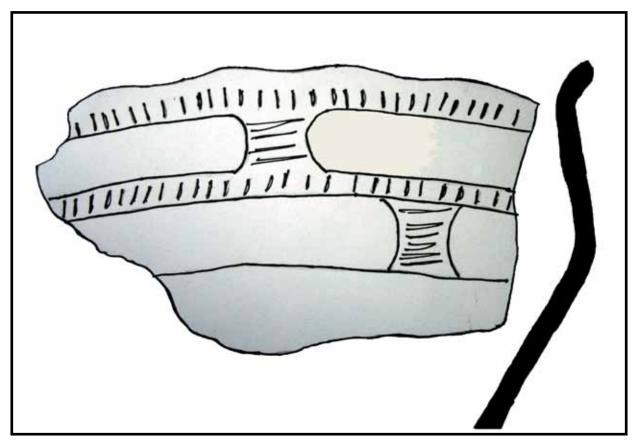


Figure 15. Rim sherd with Redwine mode rim from 41HS718.

Buddy Jones Collection Redwine Mode examples (Perttula 2006:8-9, 52, 108)

Vessel 1 (Perttula 2006:Figure 15), B-1 TAS

This is a Washington Square Paneled carinated bowl with an engraved and punctated decorative motif on the rim (Figure 16). TAS is possibly the Henry Spencer site in Upshur County, or the A. Smith site, also in Upshur County.



Figure 16. Washington Square Paneled vessel with Redwine mode rim, Vessel 1 (Perttula 2006:Figure 15), B-1, TAS.

Vessel 2 (Perttula 2006:Figure 18), B-3 TAS

This second vessel is also a Washington Square Paneled carinated bowl with an engraved and punctated motif on the rim.

Vessel 3 (Perttula 2006:Figure 151), A38, S.S.

The third vessel is an engraved carinated bowl with a series of festoon lines creating negative panels around the rim (Figure 17). The S.S. site may be the Spencer site or the Susie Slade site, or vessels with the "S.S." label may represent a combination of the two sites in the Jones collection.



Figure 17. Engraved carinated bowl with Redwine mode rim, Vessel 3 (Perttula 2006:Figure 151), A38, S.S.

Vessel 4 (Perttula 2006:Figure 308), B-3 Field Site

The fourth vessel in the Jones collection is a Ripley Engraved carinated bowl with an engraved scroll and semi-circle motif on the rim. The location of the Fields site is unknown.

G.C. 108

During more recent documentation of the Buddy C. Jones Collection at the Gregg County Historical Museum another example of a Redwine mode rim was noted. This rim sherd came from site G.C. 108, on Moody Creek, in Gregg County, Texas.

SITE NAME OR SITE NUMBER: G.C. 108

NON-PLASTICS: grog

VESSEL FORM: carinated bowl with Redwine mode rim

RIM AND LIP FORM: direct, rounding

CORE COLOR: B (fired and cooled in an reducing environment) INTERIOR SURFACE COLOR: dark grayish-brown (10YR4/2) EXTERIOR SURFACE COLOR: dark grayish-brown (10YR4/2)

WALL THICKNESS (RIM, BODY, AND BASE IN MM): 6.2, rim; 5.6, body

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: rim burnished

ORIFICE DIAMETER (IN CM): 18.5

DECORATION: row of tool punctates under lip

TYPE: cf. Washington Square Paneled

Lang Pasture Site (41AN38), by Timothy K. Perttula

The Lang Pasture site is a ca. A.D. 1350-1450 Caddo habitation site and cemetery in the upper Neches River basin. Two of the vessels from one burial (Feature 8) have Redwine mode rims. Also found in this burial were a plain bottle, a Maydelle Incised jar, and three plain carinated bowls, one of which has a interior and exterior red slip.

VESSEL 3, Feature 8 (Figure 18)

VESSEL FORM: Carinated bowl with a Redwine mode rim

NON-PLASTICS: grog and bone

CORE COLOR: B (fired and cooled in a reducing environment)

WALL THICKNESS: 5.0 mm, rim; 4.1 mm, body INTERIOR SURFACE TREATMENT: burnished EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 9.1 cm; rim height is 3.52 cm

ORIFICE DIAMETER: 17.8 cm ESTIMATED VOLUME: 1.0 liter

DECORATION: The rim has an engraved motif repeated 10 times around the vessel between upper and lower horizontal engraved lines. The motif is comprised of an engraved triangle with either horizontal or diagonal hatched lines at each of the three corners of the triangle. The points of the triangle rotate from touching the tip of the rim to touching the carination. Two diagonal engraved lines separate the triangles from each other. The distinctive engraved motif is comparable to Poynor Engraved vessels recovered from other sites in the upper Neches River basin.

TYPE: Poynor Engraved



Figure 18. Poynor Engraved carinated bowl with Redwine mode rim, Lang Pasture site (41AN38), Feature 8, Vessel 3.

VESSEL 4, FEATURE 8

VESSEL FORM: Bowl with an interior thickened Redwine mode rim

NON-PLASTICS: grog, bone, and hematite

CORE COLOR: B (fired and cooled in an reducing environment)

WALL THICKNESS: 5.35 mm, rim; 4.7 mm, body INTERIOR SURFACE TREATMENT: burnished EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 5.5 cm; Rim height, 11.0 mm in non-scalloped sections and 16.5 mm in scalloped lip sections

ORIFICE DIAMETER: 16.3 cm

DIAMETER AT BOTTOM OF RIM OR NECK: undetermined

BASE DIAMETER: undetermined ESTIMATED VOLUME: 0.35 liters

DECORATION: plain

TYPE: undetermined plain ware vessel

Cluster 2 Sites

The second cluster of sites with Redwine mode rim vessels includes five sites in Cherokee, Nacogdoches, and Shelby counties (see Figure 4). This includes both the Washington Square Mound site as well as the George C. Davis site.

Washington Square Mound Site Redwine Mode pie-crust rim vessels, by Timothy K. Perttula

A distinctive characteristic of the Washington Square Mound site (41NA49) funerary vessels from Features 31 and 95 are certain rim treatments (Perttula et al. 2009a). This includes four vessels (F31-3, F31-5, F31-10, and F95-20) with rim peaks (including one with strap handles), one with a scalloped lip (F95-21), and four (F31-7, F95-6, F95-22, and F95-32) with a Redwine or pie-crust rim mode (Figures 14-17). These particular vessel rims are articulated, forming right angles from the body of the vessel, and the lips are scalloped.

More than 8.5% of the vessels from Features 31 and 95 have rim peaks, another 8.5% have Redwine mode rims, and 2.1% have scalloped lips. Vessels with rim peaks are more abundant in the Feature 31 funerary vessels (20%) than in the Feature 95 vessels (3%), while Redwine mode rims are slightly more prevalent in Feature 95 (9.4%) than in Feature 31 (6.7%); the one scalloped rim vessel is from Feature 95.

Rim peak vessels include a Nacogdoches Engraved compound bowl, two Reavely Brushed-Incised jars, and one Washington Square Paneled compound bowl (see Hart [1982] for definitions of these Caddo ceramic types). The scalloped lip vessel is a Washington Square Paneled carinated bowl. Three of the four Redwine rim mode vessels are engraved—two carinated bowls, one identified as Nacogdoches Engraved and the other with rectilinear and continuous scrolls, and the third is an engraved bowl with a *Mode A* decoration (Hart 1982:78; Mode A rim sherds have been identified in Middle Caddo contexts at the Oak Hill Village site, see Rogers and Perttula [2004] in post-A.D. 1350 contexts)—and the fourth is a Reavely Brushed-Incised jar.

The four Redwine rim mode vessels from the Washington Square Mound site are described as follows, by feature:

VESSEL NO.: F31-7 (Figure 19) NON-PLASTICS: bone and grog

VESSEL FORM: Jar with an everted rim in the Redwine mode (i.e., flat on top and folded over at almost a 90

degree angle from the body of the vessel)

CORE COLOR: E (incompletely oxidized during firing) INTERIOR SURFACE COLOR: yellowish-red (5YR4/6)

EXTERIOR SURFACE COLOR: yellowish-red (5YR4/6) with black fire clouding

WALL THICKNESS: 6.8 mm

INTERIOR SURFACE TREATMENT: burnished

EXTERIOR SURFACE TREATMENT: smoothed at the rim-body juncture

HEIGHT: 12.2 cm

ORIFICE DIAMETER: 18.0 cm

DIAMETER AT BOTTOM OF RIM OR NECK: Undetermined

BASE DIAMETER: 10.0 cm ESTIMATED VOLUME: 1.9 liters

DECORATION: The rim has a zone of slash punctates under the vessel lip. The body has vertical brushing in eight panels separated by vertical appliqued fillets; these panels extend from the rim-body juncture to just above the base. There are also vertical rows of small punctations on the body within each of the brushed-appliqued panels.

TYPE: Reavely Brushed-Incised (Hart 1982:Figure 3-10a).



Figure 19. Reavely Brushed-Incised jar from Feature 31 at the Washington Square Mound site (41NA49)with Redwine mode rim.

VESSEL NO.: F95-6 (Figure 20a-b)

NON-PLASTICS: bone

VESSEL FORM: Bowl with a direct rim and a broad, flat lip; the rim is a Redwine mode with 16 scallops at the

lip

CORE COLOR: B (fired and cooled in a reducing environment) INTERIOR SURFACE COLOR: very dark gray (10YR3/1) EXTERIOR SURFACE COLOR: pale brown (10YR6/3)

WALL THICKNESS: 8.4 mm

INTERIOR SURFACE TREATMENT: burnished

EXTERIOR SURFACE TREATMENT: burnished, but eroded

HEIGHT: 5.0 cm

ORIFICE DIAMETER: 15.5 cm

DIAMETER AT BOTTOM OF RIM OR NECK: N/A

BASE DIAMETER: 10.4 cm ESTIMATED VOLUME: 0.3 liters

DECORATION: The rim has an engraved motif (labeled *Mode A* engraved by Hart [1982:78 and Figure 3-13a]) repeated four times around the vessel; each repeated motif is separated from the other by one or two vertical engraved lines. The engraved motif consists of squares with triangular-shaped hatched corners and a small, engraved circle in the center of the square. Three of the small circles are filled with cross-hatched lines, but one has vertical engraved lines within it.

TYPE: Undetermined Engraved (Hart 1982: Figure 3-13b), but closely resembles examples of Poynor Engraved (cf. Suhm and Jelks 1962).



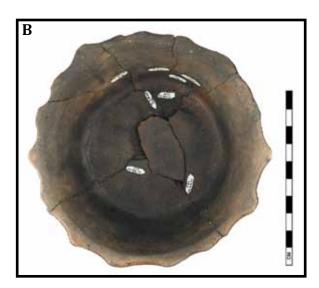


Figure 20. Bowl with Redwine mode rim, Washington Square Mound site, Feature 95, Vessel No. F95-6. a, side view; b, top view.

VESSEL NO.: F95-22 (Figure 21a-b)

NON-PLASTICS: grog

VESSEL FORM: Carinated bowl with a direct Redwine mode rim and a flat lip

CORE COLOR: B (fired and cooled in a reducing environment)

INTERIOR SURFACE COLOR: dark grayish-brown (10YR4/2) to black (10YR2/1)

EXTERIOR SURFACE COLOR: very dark grayish-brown (10YR3/2)

WALL THICKNESS: 5.6 mm

INTERIOR SURFACE TREATMENT: burnished EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 6.0 cm

ORIFICE DIAMETER: 15.0 cm

DIAMETER AT BOTTOM OF RIM OR NECK: 12.6 cm

BASE DIAMETER: 6.9 cm

ESTIMATED VOLUME: 0.55 liters

DECORATION: Engraved rectilinear continuous scrolls repeated six times around the vessel rim. Fill zones above and below each of the scrolls are composed of hatched areas and negative ovals, one in each fill zone. Narrow vertical cross-hatched zones divide the scrolls, except in one instance where the vertical hatched zone was not executed.

TYPE: Undetermined engraved fine ware vessel (Hart 1982:Figure 3-14b).





Figure 21. Carinated bowl with Redwine mode rim, Washington Square Mound site, Feature 95, Vessel No. F95-22, a, side view; b, top view.

VESSEL NO.: F95-32 (Figure 22a-b) NON-PLASTICS: grog, bone, and hematite

VESSEL FORM: Carinated bowl with a direct Redwine mode rim and flat lip. CORE COLOR: F (fired in a reducing environment and cooled in the open air) INTERIOR SURFACE COLOR: yellowish-red (5YR4/6); fire cloud on base

EXTERIOR SURFACE COLOR: very dark gray (5YR3/1), except on the lip, where it is yellowish-red (5YR4/6)

WALL THICKNESS: 6.2 mm

INTERIOR SURFACE TREATMENT: smoothed on body and rim

EXTERIOR SURFACE TREATMENT: smoothed to burnished on the body and rim

HEIGHT: 7.5 cm

ORIFICE DIAMETER: 23.5 cm

DIAMETER AT BOTTOM OF RIM OR NECK: 18.1 cm

BASE DIAMETER: 8.0 cm ESTIMATED VOLUME: 1.1 liters

DECORATION: An engraved scroll and circle motif is repeated eight times around the vessel rim. There are hatched pendant triangles or fill zones above and below each of the multi-lined scrolls. Repeated circles with a small, hatched circle in the center form the central circle.

TYPE: Nacogdoches Engraved (Hart 1982:Figure 3-6d).



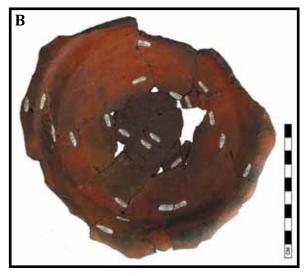


Figure 22. Nacogdoches Engraved carinated bowl with Redwine mode rim, Washington Square Mound site, Feature 95, Vessel No. 95-32, a, side view; b, top view.

George C. Davis Site (41CE19)

Rim sherds that compare favorably with the Redwine mode rim include a minimum of eight Holly Fine Engraved and two Crockett Curvilinear Incised vessels (based on rim sherds, not complete vessels) at the George C. Davis site (41CE19) on the Neches River (Newell and Krieger 1949:Figures 30e, 35d, and 37a; Suhm and Jelks 1962:Plates 16g and 39g). The Holly Fine Engraved carinated bowl in Plate 39g is described as having "a scalloped flange bent outward at right angles to the rim" (Suhm and Jelks 1962:77). The distinctive rims at the George C. Davis site likely pre-date A.D. 1300, based on the estimated age when this Caddo mound center was abandoned (Story 2000), and may be the oldest known examples of this form of rim treatment (Perttula et al. 2009a).

Redwine mode vessel from the Tallow Grove Site (41NA231), by Timothy K. Perttula

Vessel 2 in Feature 45 at the Tallow Grove site (41NA231) on Naconiche Creek in the Attoyac Bayou basin is a Washington Square Paneled carinated bowl (see Hart 1982:Figure 3-12) with a direct rim and a wide and exterior folded and flattened Redwine mode lip (Figure 23). This kind of vessel dates apparently to Middle Caddo period times at the Washington Square Mound site (Corbin and Hart 1998) and other contemporaneous sites in the Sabine and Angelina River basins (see Rogers and Perttula 2004; Walters 2008). Calibrated radiocarbon dates from the Tallow Grove site suggests it was occupied by the Caddo from the early 13th century A.D. to ca. A.D. 1480 (Perttula 2008).

There are eight exterior nodes or rim peaks around the rim of Vessel 2 (Figure 23). The vessel has grog and hematite temper, with charred organic remains in the paste, and it was fired in a reducing environment; the vessel was cooled in the open air. The rim is 5.59 mm thick, the body walls are 5.39 mm thick, and the base is 6.83 mm in thickness. The vessel interior is well smoothed, while the exterior vessel surface has smoothed to burnished patches on it.

This vessel has an engraved design on the rim. The design consists of a series of vertical panels filled with horizontal engraved lines, and these panels extend from the rim to the carination; they are placed immediately below the rim peaks. Between each of the vertical panels are set short horizontal engraved lines with shorter engraved panels or brackets pendant from the horizontal line. These short panels, also filled with horizontal engraved lines, alternately extend either to the rim or to the carination. White kaolin clay has been smeared in the engraved lines.



Figure 23. Washington Square Paneled carinated bowl with Redwine mode rim, Tallow Grove site (41NA231), Feature 45, Vessel No. 2.

Shelby County Redwine Mode Rim Examples, by Tom Middlebrook

Robert Griffin Site (41SY41)

Five Caddo burials were excavated by Dr. J. H. Burr, a Biology professor at Stephen F. Austin State University, and his student, Paul Hancock, between 1960 and 1962 at the Robert Griffin site along the Attoyac Bayou in western Shelby County, Texas. Altogether 21 ceramic vessels and approximately 400 sherds were retained from this work. Burial 2 contained a male individual with an eight-pointed carved shell pendant over the chest, a pipe near the head, a four-cornered engraved bottle, and two carinated bowls, one being a finely made vessel with Redwine mode rim treatment (Figure 24).

PROVENIENCE: Robert Griffin Site (41SY41) VESSEL NO.: Burial 2, Vessel 3

NON-PLASTICS: grog and bone

VESSEL FORM: carinated bowl with a Redwine mode rim; the pie crust rim treatment is folded outward at a greater than right angle. Sixteen symmetrical peaks or lobes are present.

CORE COLOR: B, fired and cooled in a low oxygen environment.

INTERIOR SURFACE COLOR: 10YR3/1 (very dark gray)

EXTERIOR SURFACE COLOR: 10YR3/1 (very dark gray) WALL THICKNESS: 5.5 mm

DISTAL RIM THICKNESS: 6.2 mm

DISTAL RIM WIDTH: 18.5 mm

INTERIOR SURFACE TREATMENT: burnished EXTERIOR SURFACE TREATMENT: polished

HEIGHT: 6.4 cm HEIGHT OF RIM: 3.4 cm ORIFICE DIAMETER: 14.0 cm DIAMETER AT BOTTOM OF RIM: 12.5 cm BASE DIAMETER: 7.1 cm

ESTIMATED VOLUME: 0.66 liters

DECORATION: Fine engraved lines with white kaolin pigment in some lines. There are four panels of horizontal interlocking scrolls (Thurmond 1990:Figure 6g); the central element of the scroll has a filler zone composed of vertical parallel fine engraved lines. Bi-concave columns filled with horizontal fine engraved lines separate the panels. Below the rim design at the shoulder are two parallel horizontal lines with vertical engraved line fillers. Under the pie crust rim treatment are vertical, parallel, fine engraved lines. This is a very finely made vessel both in structure and decoration. The four decorated panels are carefully arranged to conform to the 16 peaks on the Redwine mode rim.

TYPE: Burr Engraved (Middlebrook n.d.), defined as carinated bowls with either Redwine mode or Myers mode rims and engraved horizontal interlocking scrolls motifs found in Middle/Late Caddo period contexts in Shelby County and surrounding areas.



Figure 24. Engraved carinated bowl with Redwine mode rim, Robert Griffin site (41SY41), Burial 2, Vessel 3.

Buddy Hancock Site (41SY45)

Five Caddo burials were excavated by Dr. J. H. Burr and others between 1965 and 1969 at the Buddy Hancock Site on Smith Creek in central Shelby County, Texas, about one mile north of the Morse Mound site (41SY27). Twenty-eight ceramic vessels were uncovered during this work along with 362 sherds excavated from a nearby midden. Altogether, seven vessels and three rim sherds had Redwine mode rim treatments.

VESSEL NO.: Burial 1, Vessel 2 (Figure 25) NON-PLASTICS: grog and coarse bone

VESSEL FORM: Carinated bowl with a Redwine mode rim. Eleven peaks are evident on the rim, with shallow,

nearly straight intervening segments.

CORE COLOR: I, incompletely-oxidized during firing, possible smudging/sooting

INTERIOR SURFACE COLOR: 5YR4/2 (dark reddish-gray)

EXTERIOR SURFACE COLOR: 5YR2.5/1 (black)

WALL THICKNESS: 5.5 mm
DISTAL RIM WIDTH: 14.0 mm
DISTAL RIM THICKNESS: 5.8 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 6.4 cm

HEIGHT OF RIM: 3.2 cm ORIFICE DIAMETER: 17.0 cm

DIAMETER AT BOTTOM OF RIM: 13.5 cm

BASE DIAMETER: 8.4 cm

ESTIMATED VOLUME: 0.91 liters

DECORATION: Three engraved panels of horizontal interlocking scrolls with panel partitions being bi-concave columns filled with horizontal lines. The central element of the scrolls is composed of three closely spaced horizontal lines with two offset hemi-columns (one above and one below the line); the hemi-columns are filled with horizontal lines. There are no crook-shaped lines around the ends of the central element as seen in other Burr Engraved examples from this site.

TYPE: Burr Engraved (Middlebrook n.d.)



Figure 25. Burr Engraved (Middlebrook n.d.) carinated bowl with Redwine mode rim, Buddy Hancock site (41SY45), Burial 1, Vessel 2.

VESSEL NO.: Burial 1, Vessel 3

NON-PLASTICS: grog and coarse bone

VESSEL FORM: carinated bowl with Redwine mode rim; approximately 24 peaks, but only 16 are very clear

rim peaks

CORE COLOR: F, fired in reduced oxygen environment, cooled in open air

INTERIOR SURFACE COLOR: 10YR5/6 (red) EXTERIOR SURFACE COLOR: 10YR4/4 (weak red)

WALL THICKNESS: 5.0 mm DISTAL RIM WIDTH: 8.1 mm DISTAL RIM THICKNESS: 4.1 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 5.15 cm HEIGHT OF RIM: 2.8 cm ORIFICE DIAMETER: 10.7 cm

DIAMETER AT BOTTOM OF RIM: 8.5 cm

BASE DIAMETER: 4.4 cm

ESTIMATED VOLUME: 0.28 liters

DECORATION: horizontal interlocking engraved scrolls in three panels, but with no dividing elements. The central element of the scroll is a single horizontal engraved line with two offset bi-concave hemi-columns (one above and one below the central line). A crook-shaped line goes around each end of the central element. This is an unusual variant due to the small size of the peaks and the absence of dividers between the scroll panels.

TYPE: Burr Engraved (Middlebrook n.d.)

VESSEL NO.: Burial 1, Vessel 12 (Figure 26) NON-PLASTICS: grog and coarse bone

 $VESSEL\ FORM:\ Carinated\ bowl\ with\ Redwine\ mode\ rim\ treatment;\ there\ are\ 11\ subtle\ or\ gently\ rounded\ rim$

peaks.

CORE COLOR: F, fired in a reduced oxygen environment, and cooled in the open air.

INTERIOR SURFACE COLOR: 2.5YR4/4 (reddish-brown)

EXTERIOR SURFACE COLOR: 2.5YR5/6 (red)

WALL THICKNESS: 5.0 mm
DISTAL RIM WIDTH: 12.9 mm
DISTAL RIM THICKNESS: 6.2 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 4.9 cm

HEIGHT OF RIM: 2.4 cm ORIFICE DIAMETER: 9.8 cm

DIAMETER AT BOTTOM OF RIM: 8.5 cm

BASE DIAMETER: 4.1 cm

ESTIMATED VOLUME: 0.24 liters

DECORATION: The rim has nine vertical engraved columns composed of two to four closely parallel lines (resulting in some excised areas) and nine single vertical lines midway between the columns. The nine engraved segments do not conform to the 11 rim peaks.

TYPE: Undetermined engraved



Figure 26. Buddy Hancock site, Burial 1, Vessel 12: engraved carinated bowl with Redwine mode rim.

VESSEL NO.: Burial 1, Vessel 5 (Figure 27) NON-PLASTICS: grog and coarse bone

VESSEL FORM: Carinated bowl with Redwine mode rim; 12 peaks. Rim treatment peaks are very softly

rounded, often indistinct, and poorly shaped.

CORE COLOR: I, incompletely-oxidized during firing; possible smudging/sooting

INTERIOR SURFACE COLOR: 2.5YR5/3 (reddish-brown) EXTERIOR SURFACE COLOR: 5YR4/1 (dark gray)

WALL THICKNESS: 4.5 mm

DISTAL RIM WIDTH: 12 mm DISTAL RIM THICKNESS: 6.8 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 9.9 cm

HEIGHT OF RIM: 4.0 cm ORIFICE DIAMETER: 19.7 cm

DIAMETER AT BOTTOM OF RIM: 17.0 cm

BASE DIAMETER: 7.3 cm ESTIMATED VOLUME: 1.8 liters

DECORATION: Six panels of engraved (three or four closely parallel) lines forming rectilinear coverings of a short central hemi-column; panels alternate in polarity (they are opened up and down) and are separated by single engraved lines. The engraved design is crudely made.

TYPE: Undetermined engraved, but the motif may be an example of the reduction of Tyson Engraved (Middlebrook 1993).



Figure 27. Carinated bowl from the Buddy Hancock site with untyped engraved element and Redwine mode rim.

VESSEL NO.: Burial 4, Vessel 3 (Figure 28)

NON-PLASTICS: grog and bone

VESSEL FORM: carinated bowl with Redwine mode rim; 16 peaks. CORE COLOR: F, fired in reduced oxygen environment, cooled in open air

INTERIOR SURFACE COLOR: 2.5YR5/4 (reddish-brown)

EXTERIOR SURFACE COLOR: 2.5YR5/4 (reddish-brown), fire clouding

WALL THICKNESS: 5.9 mm
DISTAL RIM WIDTH: 15.6 mm
DISTAL RIM THICKNESS: 7.0 mm

INTERIOR SURFACE TREATMENT: burnished; a black organic residue noted on the interior of the vessel.

EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 9.5 cm

HEIGHT OF RIM: 4.5 cm ORIFICE DIAMETER: 18.5 cm

DIAMETER AT BOTTOM OF RIM: 15 cm

BASE DIAMETER: 8.0 cm

ESTIMATED VOLUME: 1.44 liters

DECORATION: Three panels of horizontal interlocking scrolls separated with bi-concave columns filled with horizontal lines. The central element of the scroll consists of a horizontal triple engraved line with two off set bi-concave hemi-columns (one above and one below the central line) filled with horizontal lines. The hemi-column is in a downward direction on the left end of the centerline. A crook-shaped line goes around the end of the central element.

TYPE: Burr Engraved (Middlebrook n.d.)



Figure 28. Carinated bowl with horizontal interlocking scroll design and Redwine mode rim, Buddy Hancock site, Burial 4, Vessel 3.

VESSEL NO.: Burial 4, Vessel 4

NON-PLASTICS: grog and coarse bone

VESSEL FORM: carinated bowl with Redwine mode rim; seven to eight peaks were originally present; only

three peaks are very clear.

CORE COLOR: F, fired in a reduced oxygen environment, and cooled in the open air

INTERIOR SURFACE COLOR: 2.5YR5/4 (reddish-brown) EXTERIOR SURFACE COLOR: 10R4/1 (dark reddish-gray)

WALL THICKNESS: 4.0 mm
DISTAL RIM WIDTH: 6.7 mm
DISTAL RIM THICKNESS: 3.2 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 4.3 cm

HEIGHT OF RIM: 2.1 cm ORIFICE DIAMETER: 9.0 cm

DIAMETER AT BOTTOM OF RIM: 7.5 cm

BASE DIAMETER: 3.7 cm

ESTIMATED VOLUME: 0.14 liters

DECORATION: plain

TYPE: undetermined plain vessel

NOTES: Rim broken and/or eroded for about two-thirds of the vessel circumference.

VESSEL NO.: Burial 5, Vessel 2 (partial vessel)

NON-PLASTICS: grog and fine bone

VESSEL FORM: carinated bowl with a Redwine mode rim

CORE COLOR: F, fired in a reducing environment and cooled in the open air

INTERIOR SURFACE COLOR: 2.5YR4/3 (reddish-brown)

EXTERIOR SURFACE COLOR: 2.5YR5/6 (red)

WALL THICKNESS: 6.0 mm
DISTAL RIM WIDTH: 12.5 mm
DISTAL RIM THICKNESS: 6.1 mm

INTERIOR SURFACE TREATMENT: burnished EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 5.3 cm

HEIGHT OF RIM: 3.0 cm

ORIFICE DIAMETER: approximately 11-12 cm DIAMETER AT BOTTOM OF RIM: 9.0 cm BASE DIAMETER: approximately 6.0 cm

DECORATION: plain

TYPE: Undetermined plain vessel

NOTES: Partial vessel; approximately 33% of the vessel is present (14 sherds); three sherds are conjoined to

form a large section of the rim and body with a small section of the base.

PROVENIENCE: 41SY45, "surface/shovel test"

VESSEL NO.: Rim Sherd NON-PLASTICS: grog

VESSEL FORM: undetermined; possible carinated bowl; Redwine mode rim present, and a single rim peak.

CORE COLOR: A, fired and cooled in the open air INTERIOR SURFACE COLOR: 5YR5/4 (reddish-brown) EXTERIOR SURFACE COLOR: 2.5YR5/4 (reddish-brown)

WALL THICKNESS: 6.5 mm
DISTAL RIM WIDTH: 8.0 mm
DISTAL RIM THICKNESS: 7.1 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: undetermined

ORIFICE DIAMETER: approximately 20-22 cm DIAMETER AT BOTTOM OF RIM: undetermined

BASE DIAMETER: undetermined ESTIMATED VOLUME: undetermined

DECORATION: none visible TYPE: undetermined

PROVENIENCE: 41SY45, "surface/shovel test"

VESSEL NO.: Rim sherd

NON-PLASTICS: coarse bone and grog

VESSEL FORM: Undetermined, possible carinated bowl; has Redwine mode rim CORE COLOR: F, fired in a low oxygen environment and cooled in the open air

INTERIOR SURFACE COLOR: 10R5/4 (weak red) EXTERIOR SURFACE COLOR: 10R5/4 (weak red)

WALL THICKNESS: 4.5 mm
DISTAL RIM WIDTH: 15.2 mm
DISTAL RIM THICKNESS: 7.1 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT: undetermined

ORIFICE DIAMETER: approximately 20 cm DIAMETER AT BOTTOM OF RIM: undetermined

BASE DIAMETER: undetermined ESTIMATED VOLUME: undetermined

DECORATION: Parallel diagonal incised lines are present under the rim treatment. A single engraved horizontal line is present about 0.5 cm below rim treatment; this line may be part of a horizontal interlocking

scroll.

TYPE: undetermined

PROVENIENCE: 41SY45, "surface/shovel test" (Figure 29)

VESSEL NO.: Rim Sherd NON-PLASTICS: grog

VESSEL FORM: undetermined, possible carinated bowl; Redwine mode rim present.

CORE COLOR: B, fired and cooled in a low oxygen environment

INTERIOR SURFACE COLOR: 7.5YR4/2 (dark brown) EXTERIOR SURFACE COLOR: 7.5YR5/3 (brown)

WALL THICKNESS: 4.6 mm
DISTAL RIM WIDTH: 0.95 mm
DISTAL RIM THICKNESS: 3.3 mm

INTERIOR SURFACE TREATMENT: smoothed

EXTERIOR SURFACE TREATMENT: smoothed/burnished

HEIGHT: undetermined

ORIFICE DIAMETER: approximately 18 cm DIAMETER AT BOTTOM OF RIM: undetermined

BASE DIAMETER: undetermined ESTIMATED VOLUME: undetermined

DECORATION: Portion of the mid-section of an engraved scroll; triangular spaces above and below this scroll section have fillers of cross-hatched bi-concave pillars outlining negative circles. This is an unusual scroll design for a Redwine mode vessel at this site.

TYPE: Undetermined

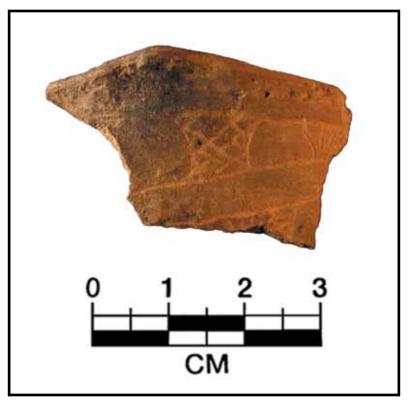


Figure 29. Engraved rim sherd with Redwine mode rim, Buddy Hancock site, "surface/shovel test."

Three isolated Redwine mode examples from Arkansas

Bowman Site (3LR46/3LR50)

At Southern Arkansas University (SAU) in Magnolia, Arkansas, there is a collection of vessels with rims with the Redwine rim mode. Nine are from the Bowman site (3LR46/3LR50), a large and relatively unknown Caddo mound site located on the Red River and Choctaw Bayou west of Texarkana. The site is divided into several residential and ceremonial areas, hence the different site numbers. There are no radiocarbon dates from Bowman but ceramics such as Holly Fine Engraved, Hickory Fine Engraved, and Weches Fingernail Impressed indicate that an Early Caddo period (ca. A.D. 1000-1200) occupation is present, but it is unknown during what other periods the site may have been occupied.

Examples 1-8 from the Bowman site are vessel forms Frank Schambach has termed "elephant foot" because of their unusual shape. Apart from having Redwine mode rims, the unusual vessels also have lobed bases much in the same fashion as the lobed rims. Some also had leg-like appendages below the base; suspension holes were also a common trait.

These vessels are described as follows:

1. From the Spenser collection (3LR46). A plain bowl with suspension holes (Figure 30).

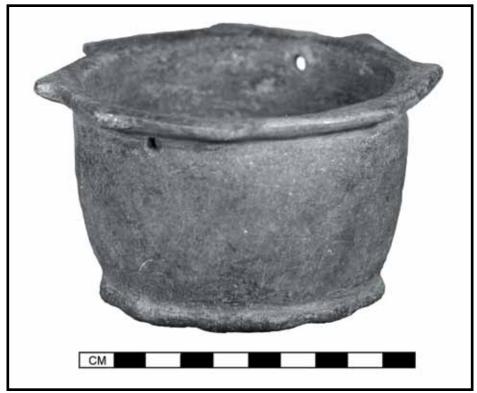


Figure 30. Plain jar from Spenser collection from the Bowman site (3LR46) with Redwine mode rim.

2. Chance collection (3LR46). This jar has rows of horizontal incised lines below the rim with punctates on the lower portion of the vessel. There is a row on nodes around the middle of the vessel. This vessel also has leg-like appendages extending from the base (Figure 31).



Figure 31. Incised and punctuated jar with Redwine mode rim from the Chance Collection from the Bowman site (3LR46).

- 3. Shurtleff collection (3LR50). From Mound 2, Burial 5. The decoration on this vessel consists of horizontal incised lines with a ring of nodes around the middle of the vessel.
- 4. Shurtleff collection (3LR50). Mound 2, Burial 1. The vessel is decorated with horizontal rows of incised lines. It also has suspension holes.
- 5. Shurtleff collection (3LR50). Mound 2, Burial 1. Horizontal and vertical rows of incised lines decorate this vessel. The vessel also has suspension holes.
- 6. Shurtleff collection (3LR50). Decoration on this "elephant foot" vessel consists of random instrument punctates; there are also suspension holes.
- 7. Shurtleff collection (3LR50). Mound 2, Burial 5. This vessel is decorated with rows of diagonal incised lines with a row of nodes and punctates around the middle of the vessel.
- 8. Shurtliff collection (3LR50). Mound 2, Burial 5. This vessel had two opposing suspension holes through the flattened rim and nodes on the exterior body wall. Decoration was rows of tool punctuates (Figure 32).



Figure 32. Top view of Redwine mode rim from the Shurtleff Collection at the Bowman site (3LR50).

The ninth vessel from the Bowman site (3LR50) is a partial vessel with a complete Redwine mode rim. The rim is flattened and articulated at a right angle from the body of the vessel, and has 25 evenly spaced lobes. The vessel decoration is excised triangles on top of each lobe with engraved lines between each node. The shape of the vessel and the excised triangles on the top of the flattened rim surface compare with an example of Holly Fine Engraved illustrated by Suhm and Jelks (1962:Plate 39g).

Clark Site (3AS154) and 3HE35

Other examples of Redwine mode rims in the SAU collections include two other vessels: (1) Clark site (3AS154), White collection, Vessel 20. This is an incised bowl with the Redwine mode rim and also a lobed base; and (2) Museum of the American Indian Collection (3HE35). This bowl is decorated with random instrument punctuates and has a row of nodes around the middle of the vessel. It also has suspension holes (Figure 33).

Finally, there is a possible Redwine mode rim example on a carinated bowl with an engraved rectangular scroll design in "Art of the Ancient Caddo" (Bonds 2006: Figure 326). Unfortunately no provenience is listed for this example, although it is probable that the vessel came from a Caddo site in southwestern Arkansas.



Figure 33. Jar with Redwine mode rim from the M. R. Harrington Collection (3LR35).

Myers or Sprocket Rim Mode Vessels

The Myers mode rim form is another unique rim form that is primarily restricted to vessels from a cluster of sites in the Great Bend and Little Missouri regions of southwestern Arkansas (see Figure 5). Myers mode rim vessels also occur on isolated Caddo sites in eastern Texas (Table 2). Myers mode rim vessels appear to date from the Middle Caddo period as well as the early part of the Late Caddo period (A.D. 1400-1500).

Table 2. Sites with Myers mode rims and number of examples.

Site	No.	Site	No.
3MI139	1	41UR315	1
3H01	2	McDaniel	1
41SM193	2	Hollywood Creek	1
41RR77	2	Clark Co., Arkansas	1
41NA49	2	Bowie Co., Texas	1
41SY45	1		
3HE35	1		

The Myers mode rim form was identified on certain Myers Engraved vessels, a new pottery type identified during analysis of ceramics from the Middle Caddo Myers site (3M139) in southwestern Arkansas. Based on a single sherd (Class 55) (Miller 1986:95) of this undefined type from the Myers site and 12 additional specimens from other sites, the new type, Myers Engraved was identified. Myers Engraved is described as having two widely spaced horizontal engraved lines on the upper portion of the rim, and on the lower portion of the rim there is a single meandering line of small tool punctates, often slightly smoothed over by polishing. There are two lip treatments, one gently rounded and flush with the rim; the other cogged or sprocketed. John Miller (1986:97) described the later rim treatment as "cogged or sprocketed lips or rims which consisted of a series of triangular cogs which radiate outward at almost right angles to the rim." In certain instances, the short arm of the triangles appear to have cut edges to shape them, probably done when the vessel was in a leather-hard stage prior to firing. Since the lip was missing from the Myers Engraved sherd identified at the Myers site, it was not conclusive if it had a sprocket rim. However, Miller (1986:94) illustrated an un-typed sprocket rim sherd with a horizontal engraved line (Class 54).

Great Bend and Little Missouri regions

Certain varieties of Handy Engraved and Haley Engraved carinated bowls in the Great Bend and Little Missouri regions of southwestern Arkansas have Myers mode rims. This includes vessels from the Haley, Washington, and Mineral Springs sites.

Myers mode rim vessels are known from the Haley site (3MI1). One example is a Myers Engraved bowl from Cemetery 2, Field Burial 26 (Miller 1986:Figure 15b). A second example from the same burial is an untyped sprocket-rimmed bowl (Miller 1986:Figure 16b). This large vessel had an engraved line around the flattened rim. These vessels were found in association with Crockett Curvilinear-Incised, Hickory Fine Engraved, Pease Brushed-Incised, Moore Noded, Handy Engraved, and a Haley variety Red River style pipe. Also from the Haley site (Shurtleff Collection) there are two Myers mode rim examples: one is a Myers Engraved bowl and the second a plain is untyped bowl (Miller 1986:Figures 19a-c).

There is an example of the Myers Mode from the Washington site (3HE35) (Miller 1986:Figures 16b, 19a, and 22; Moore 1912:Figure 50). This and similar vessels are part of the Caddo collections gathered by Harrington (1920) on Ozan Creek in southwestern Arkansas, and were at the American Museum of Natural History (Gonzalez et al. 2005:Figures 6.5, A3.17, and A3.27) until they were recently repatriated to the Caddo Nation of Oklahoma.

There are also at least two examples of Myers mode rims from the Mineral Springs site (3HO1) (Bohannon 1973). Mineral Springs is a large and complex multiple-mound site whose most intensive use of the site seems to have occurred during the Middle Caddo Haley phase. The first vessel is a Handy Engraved bowl (Bohannon 1973:Figure 10e) from Burial 9, a multiple burial with numerous artifacts including vessels of Glassell Engraved, Friendship Engraved, Haley Complicated-Incised, Haley Engraved, Pease Brushed-Incised, and Hempstead Engraved. The second Myers mode rim vessel came from Burial 10 and was described as a Hodges Engraved bowl (Bohannon 1973:Figure 13p). From the report, the bowl appears to have a slanted scroll design with central circle elements. However, a bottle from Burial 10, is also described as Hodges Engraved but more closely resembles Bailey Engraved (Bohannon 1973:Figure 13o). Other associated items in Burial 10 include Haley Engraved and Haley Complicated-Incised, Pease Brushed Incised, Maddox Engraved, Handy Engraved, Glassell Engraved, Avery Engraved, and Red River var. Haley pipes. These ceramic types in this burial are not typically associated with the later Hodges Engraved or Bailey Engraved types, but taken together would suggest a Middle Caddo occupation or one that lasted until ca. A.D. 1400-1500.

Boyce Smith Collection, Troup, Texas

In the Boyce Smith collection (Perttula et al. 2009b) there are two vessels with Myers mode rims from southwestern Arkansas. Site-specific provenience information is not available, but both are from Caddo sites in Clark County.

SITE NAME OR SITE NUMBER: Clark County, Arkansas

VESSEL NO.: 59 NON-PLASTICS: grog

VESSEL FORM: carinated bowl with Myers mode rim (four sprockets)

RIM AND LIP FORM: direct/rounded

CORE COLOR: B (fired and cooled in a reducing environment)

INTERIOR SURFACE COLOR: undetermined EXTERIOR SURFACE COLOR: undetermined

WALL THICKNESS (RIM, BODY, AND BASE IN MM): rim, 4.9 cm

INTERIOR SURFACE TREATMENT: burnished on rim, smoothed on body

EXTERIOR SURFACE TREATMENT: burnished

HEIGHT: 6.0 cm

ORIFICE DIAMETER: 19.5 cm

DIAMETER AT BOTTOM OF RIM OR NECK: 20.5 cm

BASE DIAMETER: rounding

DECORATION: It has an engraved design that is repeated four times around the vessel, with red pigment in lines. The design consists of a hooked-arm motif with alternating triangles filled with hatching or cross-hatching.

TYPE: undetermined

SITE NAME OR SITE NUMBER: Hollywood Creek, Clark County, Arkansas (Figure 34a-b)

VESSEL NO.: 146 NON-PLASTICS: grog

VESSEL FORM: carinated bowl with Myers mode rim (four sprockets)

RIM AND LIP FORM: direct/rounded, exterior folded CORE COLOR: undetermined

INTERIOR SURFACE COLOR: undetermined EXTERIOR SURFACE COLOR: undetermined

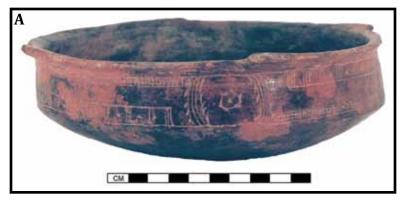
WALL THICKNESS (RIM, BODY, AND BASE IN MM): rim, 5.6 cm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT: 6.0 cm ORIFICE DIAMETER: 19.0 cm
DIAMETER AT BOTTOM OF RIM OR NECK: 20.0 cm
BASE DIAMETER: rounding

DECORATION: rectangular panels repeated four times, with ticked line running horizontally through the blank spaces of the panel. The central circular element with tick marks is repeated four times, once under each sprocket.

TYPE: Glassell Engraved



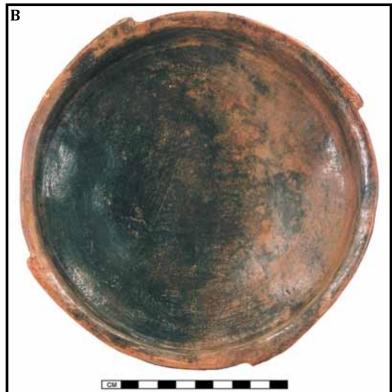


Figure 34. Engraved carinated bowl with Myers mode rim, Hollywood Creek, Clark County, Arkansas: a, side view; b, top view

Bowie County, Texas

In the Boyce Smith collection (Perttula et al. 2009b) there is one vessel with a Myers mode rim from Bowie County, Texas (Figure 35a-b).

SITE NAME OR SITE NUMBER: Bowie County, Texas VESSEL NO.: 128

NON-PLASTICS: grog VESSEL FORM: carinated bowl with Myers mode rim (16 sprockets)

RIM AND LIP FORM: direct rim and a rounded, exterior folded lip

CORE COLOR: B (fired and cooled in a reducing environment)

INTERIOR SURFACE COLOR: undetermined EXTERIOR SURFACE COLOR: undetermined

WALL THICKNESS (RIM, BODY, AND BASE IN MM): rim, 9.3 cm

INTERIOR SURFACE TREATMENT: smoothed on rim EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT: 16.4 cm ORIFICE DIAMETER: 33.6 cm
DIAMETER AT BOTTOM OF RIM OR NECK: 33.5 cm
BASE DIAMETER: 14.5

 $DECORATION: The \ upper \ part \ of \ the \ rim \ has \ two \ widely-spaced \ horizontal \ engraved \ lines. \ Below \ those \ are \ 16$

alternating engraved semi-circles, separated by a row of punctations.

TYPE: undetermined





Figure 35. Myers mode rim, Bowie County, Texas: a, side view; b, top view.

Rowland Clark site (41RR77)

Perino (1994:29 and Figure 13f) identifies Myers mode rims on several Clark Engraved bowls from the Rowland Clark site (41RR77) on the Red River. These occur in early McCurtain phase contexts (ca. A.D. 1300-1500). He describes these vessels as follows: "bowls frequently have four small and outward projecting sprocket-like lugs on the vessel rim; the sprocket-like lugs slant from the top of the sprocket to the base of the adjoining sprocket. Some Clark Engraved bowls have small, flattened lugs on the rim, and others have an extra sprocketed rim."

Eastern Texas

There are at present at least three known sites scattered across eastern Texas with examples of vessels with Myers mode rims (see Figure 5). Two of those sites, Redwine and Buddy Hancock, have examples of both Myers and Redwine mode vessels in the same burial context. This would seem to indicate that the two distinctive modes were in use at the same time, although the distribution of the two mode forms demonstrates that Caddo potters in different regions had different and very distinct ideas on vessel rim treatment that were made evident on their pottery. Furthermore, while the two modes had distinct boundaries in the Caddo area, vessels with these two modes in the same burial features at two sites is direct evidence of inter-regional contact.

Redwine Myers Mode Rim Vessel 1 (Walters and Haskins 1998:Figure 13e) (Figure 36)

SITE NAME OR SITE NUMBER: Redwine (41SM193) VESSEL NO.: Burial 3

NON-PLASTICS: grog VESSEL FORM: carinated bowl

RIM AND LIP FORM: direct, rounded with Myers mode rim with 20 sprockets

CORE COLOR: F, fired in reduced oxygen environment, cooled in open air

INTERIOR SURFACE COLOR: 10YR5/2 (grayish-brown) Fire clouding on rim, body, and the base.

EXTERIOR SURFACE COLOR: 10YR4/2 (dark grayish-brown) Fire clouding on the rim, body, and the base.

WALL THICKNESS (RIM, BODY, AND BASE IN MM): rim, 4.5

INTERIOR SURFACE TREATMENT: burnished on rim, body smoothed

EXTERIOR SURFACE TREATMENT: burnished HEIGHT: 5.5 cm

ORIFICE DIAMETER: 20.0 cm DIAMETER AT BOTTOM OF RIM OR NECK: 17.0 cm

BASE DIAMETER: 18 cm, rounded

DECORATION: Engraved continuous scroll filled with tool punctates, repeated five times around the vessel. The corners of the upper and lower scroll fill zone are filled with concentric circles and cross-hatching. There is a white pigment in the lines. The design element also resembles Nacogdoches Engraved (Hart 1982:46-63). TYPE: cf. Handy Engraved



Figure 36. Handy Engraved vessel with Myers mode rim, the Redwine site.

Redwine Myers Mode Rim Vessel 2 (Walters and Haskins 1998:Figure 11e) (Figure 37)

SITE NAME OR SITE NUMBER: Redwine (41SM193)

VESSEL NO.: Burial 1 NON-PLASTICS: grog

VESSEL FORM: carinated bowl

RIM AND LIP FORM: direct, flat with Myers mode rim, 21 sprockets evenly spaced around the top. In this example, the rim is not so much rolled out as it is thickened to form the cogs of the sprocket. Also, the backside of the cogs is more abrupt, appearing to have been cut with some instrument before the final firing took place. There are other examples of ceramics appearing to have been cut with some instrument prior to firing, such as certain pipes from the Tom Jones site (3HE40) in Arkansas.

CORE COLOR: F, fired in reduced oxygen environment, and cooled in open air

INTERIOR SURFACE COLOR: 7.5YR4/1 (dark gray) EXTERIOR SURFACE COLOR: 7.5YR5/3 (brown)

WALL THICKNESS (RIM, BODY, AND BASE IN MM): rim, 10.2; body, 7.6; base, 9.0

INTERIOR SURFACE TREATMENT: burnished EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT: 10.3 cm

ORIFICE DIAMETER: 32.0 cm

DIAMETER AT BOTTOM OF RIM OR NECK: 28.0 cm

BASE DIAMETER: 13.5 cm

DECORATION: incised-punctated freestanding scrolls. There are rows of tool punctates under the lip and at

carination point.

TYPE: cf. Washington Square Paneled



Figure 37. Washington Square Paneled bowl with Myers mode rim, the Redwine site.

Buddy Calvin Jones Collection

There are two vessels with Myers mode rims in the Buddy Calvin Jones Collection presently located at the Gregg County Historical Museum in Longview, Texas. One is from the Henry Spencer site in the Little Cypress Creek basin.

Henry Spencer site (41UR315)

SITE NAME OR SITE NUMBER: Henry Spencer site (41UR315), Gregg County 2008-08-978 (Figure 38a-b)

VESSEL NO.: Burial 10 NON-PLASTICS: grog VESSEL FORM: carinated bowl

RIM AND LIP FORM: direct rim and rounded lip with Myers mode rim with eight sprockets.

CORE COLOR: F, fired in reduced oxygen environment, then cooled in open air

INTERIOR SURFACE COLOR: 10YR5/2 (grayish-brown)

EXTERIOR SURFACE COLOR: 10YR3/2 (very dark grayish-brown) WALL THICKNESS (RIM, BODY, AND BASE IN MM): Undetermined

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT: 6.0 cm ORIFICE DIAMETER: 17.2 cm

DIAMETER AT BOTTOM OF RIM OR NECK: 15.5 cm BASE DIAMETER: 7 cm

DECORATION: engraved curvilinear scroll motif repeated four times around body, and a red clay pigment has

been rubbed in the lines
TYPE: undetermined





Figure 38. Engraved carinated bowl with Myers mode rim from the Henry Spencer site: a, side view; b, top view.

The second Myers mode vessel in the Jones collection lacks information about its site provenience or the vessel's association with other artifacts.

SITE NAME OR SITE NUMBER: Undetermined

VESSEL NO.: Gregg County 2003-08-1017 (Figure 39)

NON-PLASTICS: grog

VESSEL FORM: carinated bowl (partial vessel)

RIM AND LIP FORM: direct rim and a rounded, exterior folded lip with Myers mode rim

CORE COLOR: F, fired in reduced oxygen environment, cooled in the open air

INTERIOR SURFACE COLOR: 5YR5/3 (reddish-brown) EXTERIOR SURFACE COLOR: 5YR5/3 (reddish-brown)

WALL THICKNESS (RIM, BODY, AND BASE IN MM): rim, 6.8 cm, body, 6.5 cm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: smoothed

HEIGHT: undetermined

ORIFICE DIAMETER: undetermined

DIAMETER AT BOTTOM OF RIM OR NECK: undetermined

BASE DIAMETER: undetermined

DECORATION: engraved curvilinear scroll repeated four times around the vessel rim, with red pigment in the

engraved lines

TYPE: undetermined



Figure 39. Close-up view of Myers mode rim with cut-edge from a vessel in the Buddy Calvin Jones Collection.

Buddy Hancock site (41SY45)

The last known location of a Myers mode vessel in East Texas is from a burial at the Buddy Hancock site (Figure 40). This is the only vessel known from Shelby County featuring a Myers mode sprocket rim treatment.

VESSEL NO.: Burial 1 NON-PLASTICS: coarse bone and grog

VESSEL FORM: Carinated bowl with Myers mode rim, 20 sprockets. Cutting one side of the sprocket apparently

shaped the sprockets of this vessel while the vessel was leather hard.

CORE COLOR: F, fired in a reduced oxygen environment, cooled in the open air.

INTERIOR SURFACE COLOR: 10R5/4 (weak red)

EXTERIOR SURFACE COLOR: 5YR4/1 (dark gray); fire clouding

WALL THICKNESS: 7.1 mm

DISTAL RIM WIDTH: 17.5 mm DISTAL RIM THICKNESS: 5.8 mm

INTERIOR SURFACE TREATMENT: smoothed EXTERIOR SURFACE TREATMENT: polished

HEIGHT: 9.0 cm HEIGHT OF RIM: 3.9 cm

ORIFICE DIAMETER: 20.0 cm DIAMETER AT BOTTOM OF RIM: 16.5 cm

BASE DIAMETER: 7.6 cm
ESTIMATED VOLUME: 1.61 liters

DECORATION: Four engraved panels of horizontal interlocking scrolls with panel partitions being bi-concave columns or brackets filled with cross-hatching. All engraved lines are filled with white kaolin clay pigment. The central element of the scroll is a horizontal line with two offset hemi-columns (one above and one below the line); the hemi-columns are cross-hatched filled. The remainder of the scroll consists of crook-shaped lines around the ends of the central element. Additional engraved lines are found in a radiating pattern under the sprocket rim treatment.

TYPE: Burr Engraved (Middlebrook n.d.)



Figure 40. Engraved carinated bowl with Myers mode rim from Buddy Hancock site.

Summary

We have defined a new Caddo pottery rim mode (the Redwine or pie crust mode) based on known vessel examples in the published literature and from the examination of various collections. This distinctive rim treatment is found at two Early Caddo mound centers, Bowman and Davis (but with an occupation known to have lasted until ca. A.D. 1300, see Story 2000), and then otherwise almost exclusively on Middle Caddo (A.D. 1200-1400) period vessels in East Texas.

The Redwine mode of rim construction is unique in Caddo pottery. Rims that are at abrupt right angles to the vessel wall and have evenly spaced scalloped lobes are the defining traits, though we have noted some subtle variations of the Redwine mode rim form:

- 1. At the Redwine Site and neighboring 41SM196, the Redwine mode appears on bowls that are marked by rims that are articulated at right angles and the upper vessel wall is thickened for support. The flattened lobes are more massive than other Redwine mode examples and often have engraved elements on top of the flattened lobes.
- 2. Also present at Redwine and other sites, including 41SM325, 41SM198, 41SM223, 41HS718, 41RK276, 41UR315, and G.C. 108, there is a second form of rim mode, usually found on carinated bowls having Washington Square Paneled designs. The rims are at right angle to the vessel wall but not thickened to the degree as example one from Redwine. No instances are known of there being decorations on top of the lobes but there is often decoration (i.e., incised lines or a row of punctates) on the underside of the lobes.

The remainder of the Redwine mode examples are from bowls with rims shaped like the second form and decorated with various Middle Caddo engraved elements, (plus other elements including punctuates and brushing) with strap handles, and black burnished or polished surfaces, excepting one plain vessel from the Lang Pasture site.

The origins of the Redwine rim mode are not clear. However, the numerous Redwine mode rims examples at the Bowman site on the Red River and the George C. Davis site in East Texas may point to the origin(s) of the Redwine mode. Since the Davis site was occupied from ca. A.D. 850-1300 (Story 2000), and the Bowman site may have also had a long occupation beyond its major Early Caddo component, it is presently unclear if the Redwine mode vessels at either site occur in contexts that pre-date A.D. 1200. If that were the case it would obviously suggest the temporal origin of the Redwine mode rim; it further could indicate close ties between these two important Caddo sites.

Following a putative pre-A.D. 1200 origin, there was a florescence of this rim mode style during the Middle Caddo period in certain distinct areas, particularly in East Texas (see Figure 4). The tracing of this mode through space and time could show the dispersal and range of the people who once inhabited the Davis site, if George C. Davis or a site in its vicinity was where this style was first developed. The presence of Redwine mode rims at the Washington Square Mound site shows a continuation of this style. The Washington Square Mound site is thought to be a later manifestation of the Davis site (Hart 1982:135-138), or at least that it began to flourish about the same time that the George C. Davis site was losing power and social authority among East Texas Caddo groups (Perttula 2009:190), The known examples of Washington Square Paneled and Nacogdoches Engraved at Redwine point to a strong connection between the Washington Square Mound and Redwine sites, which are located about 75 miles apart. There are also certain elements in the Redwine mortuary offerings—such as Haley Engraved design elements and the presence of Red River, *var. Haley* pipes (Walters and Haskins 1998:Figure 15c)—that point to connections with Caddo groups on the Red River, such as at the Haley site (3M11), which is about 100 miles northeast of Redwine. Another possible East Texas-Haley

phase connection at Redwine was a possible Haley Complicated-Incised jar (Walters and Haskins 1998:Figure 11g), but this could have also been a variant of Reavely Brushed-Incised (Hart 1982), a local Washington Square Mound ceramic type.

Although there does not seem to have been many vessels with Redwine mode rims, its use seems to have reached its greatest popularity in Middle Caddo times, a time when Caddo populations seemed to be at their greatest numbers and artistic expression in ceramic vessels at its greatest level. After A.D. 1400, Caddo populations seemed to have diminished in some regions, even to the point of abandonment of much of what is now Smith County, Texas. In addition, after this time in East Texas sites, there is a noticeable decrease in the variety of stylistic motifs and decorative elements on Caddo ceramics. Whether these changes were the result of significant climate changes, social upheavals, or simply changes in ways of doing things, is unknown at the present time, but the further study of the Redwine mode, as well as the Myers mode, may be a way to help determine what happened at the end of the Middle Caddo period, and how those changes affected Caddo ceramic styles.

Did the Redwine mode or Myers mode vessels originate from one source or did different Caddo groups copy or produce their own version of what they thought such vessels should look like? The current evidence suggests the latter is the more likely possibility. Although similar in some ways, the Redwine mode rim vessels are distinctly different from the Meyer's mode rims, not the least of which is that the latter rim treatment occurs primarily on Caddo sites in southwestern Arkansas. Certainly the concept of the Redwine mode was a local innovation that gained wider acceptance through time and space, but by what avenue? Instrumental neutron activation analysis of these vessels may shed light on the ultimate provenience of these vessels, and determine if they were made in one, a few, or multiple locales across the Caddo area. There are examples of this form in earlier Alto phase contexts, after which the rim mode idea became more popular in the Middle Caddo period, only to fall from usage in later Caddo times. The combination of vessels with Redwine mode rims and designs such as Washington Square Paneled and Nacogdoches Engraved point to connections between Caddo groups south and west of the Sabine River and other groups living to the south in the Angelina River drainage. The Redwine mode is noticeably absent north and east of the Sabine River, suggesting limited contact with Caddo groups in those areas, the existence of different ceramic traditions, or at least differences in ideas/beliefs as they were portrayed through their pottery.

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Two Shell Gorgets from Southwest Arkansas

Mary Beth Trubitt

Recently, there has been great interest in marine shell gorgets from the Mississippian period Southeast, not only in identifying styles or types and their geographic distributions (e.g., Brain and Phillips 1996; Hally 2007; Muller 1997), but in refining the chronology of engraved shell gorgets and other artwork (e.g., Brown 2007; Sullivan 2007). There have also been new studies looking at iconography of the engraved shell art, such as Reilly's (2007) work on the petaloid motif on Spiro shell cups as a locative that indicates a celestial location for depicted objects, individuals, or events, and Lankford's (2007) examination of Cox Mound and Hixon style gorgets as cosmological models portrayed on shell in plan and profile.

These discussions are seated on basic groundwork that identifies specific shell artifacts, the sites they came from, context and associations, and dating. In a recent article, Smith and Beahm (2009) corrected the find location (from near Rogana, Tennessee to near Rowena, Kentucky) for a shell long-nosed god mask in National Museum of the American Indian collections. They show that there is the potential for this kind of basic groundwork even with old collections.

In this article I describe and illustrate two previously unpublished marine shell gorgets from the Arkadelphia area in southwest Arkansas. Both were recovered from sites in the Middle Ouachita River region with Caddo associations. Both are curated in Arkansas Archeological Survey collections at the Henderson State University Research Station in Arkadelphia. Unfortunately neither was professionally excavated so we are lacking the important context information for these artifacts. Finds reported by amateurs or collectors need to be used with caution. Nevertheless, we can add these to the compendium of marine shell gorgets as a contribution to the database on Southeastern art and iconography.

There have been many different kinds of marine shell ornaments – ear ornaments, beads of several types, pendants, gorgets, and cups – found at Caddo sites in southwest Arkansas. Examples include engraved ear ornaments recovered from Hardman (3CL418, Clark County, Early 1993) and shell ear ornaments with copper bosses from Haley Place (3MI1, Miller County, Moore 1912), shell cups from Standridge (3MN53, Montgomery County, Early 1988), Bowman (3LR46, Little River County, Hoffman 1970; Phillips and Brown 1978), and Foster Place (3LA27, Lafayette County, Moore 1912), small plain shell pendants from Goodlett/Ozan Site 11 (Hempstead County, Harrington 1920) and engraved zoomorphic pendants from Cedar Grove (3LA97, Lafayette County, Trubowitz 1984). This does not give a complete inventory, but suggests some of the variety of marine shell artifacts found in this area of the ancient Caddo world.

Gorgets made from marine shell are relatively rare from southwest Arkansas sites. The overview by Brain and Phillips (1996) describes 28 gorgets from Arkansas, most from counties in the northeastern part of the state; only 3 are from counties in southwest Arkansas (1 from Clark County and 2 from Lafayette County). The gorgets described below can be added to this list.

The first is a plain gorget from Bayou Sel (3CL27, AAS accession number 74-248), a multi-component salt production site on the Ouachita River (Figure 1). Philip Phillips tested there during his 1939 Ouachita River Valley Survey, and Frank Schambach did brief test excavations in 1966 and 1969 (Early 1993). Based on Schambach's preliminary analysis of ceramics from the 1966-69 tests, Bayou Sel had use by Caddo Indians during what is now termed the East, Mid-Ouachita, and Social Hill phases (ca. A.D. 1100-1650; Early 2002a, b, c); available radiocarbon dates place site occupation between the late 1200s and early 1600s cal A.D. Bayou Sel was placed on the National Register of Historic Places in 1974.

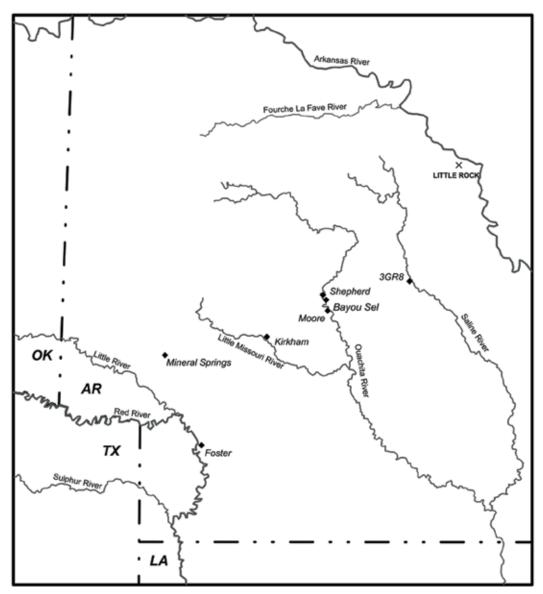


Figure 1. Sites in southwest Arkansas with marine shell gorgets.

The Bayou Sel gorget apparently came from a burial exposed by bulldozing and/or dug by local collectors in 1972 and was reported to have been associated with several vessels including Friendship Engraved and Military Road Incised types (typical of the Mid-Ouachita phase, A.D. 1400-1500). It was donated to the AAS/HSU station in Arkadelphia by Dale Patrick, and accessioned in 1974. The gorget is not engraved, but has smoothed edges and a pair of drilled suspension holes (Figure 2). One of the holes is broken open. The artifact measures 9.2 x 8.3 cm and is oval in shape. The original shell surface has been worn away, presumably pre-deposition. It is made from marine *Busycon* or whelk shell.



Figure 2. Plain shell gorget from Bayou Sel (AAS/HSU D_K1113 and 1116, 74-248, 3CL27).

The second piece is an engraved gorget from the Shepherd site (3CL39, AAS accession number 74-249) (Figure 3). Not much is known about the Shepherd or Evans Mound site, but it had several areas of artifact concentrations including one with Archaic period stone tools and another with ceramic sherds around a mound that was destroyed by 1967. The gorget was donated to the AAS/HSU station in Arkadelphia by Dale Patrick, who had acquired it following bulldozing operations at the site in the mid-1960s. Reportedly associated with the gorget were two seed jars and a Friendship Engraved bowl, suggesting a Mid-Ouachita phase context (A.D. 1400-1500).



Figure 3. Engraved shell gorget from Shepherd (AAS/HSU D_K1119 and 1122, 74-249, 3CL39).

The Shepherd gorget has an irregular circular shape, has two drilled suspension holes, and is engraved on the interior of the shell (Figure 3). It is made from marine shell, presumably *Busycon* or whelk shell, and measures 11.2 x 11.7 cm. The edges were cut and smoothed, and most of the outer shell surface is intact, but it looks like a coating was put on the artifact as a preservative following excavation. The engraved design is based on concentric circles with a four-pointed cross with circle and dot in the center. The outer edge has engraved lines to form a somewhat abstracted scalloped outer edge. The next band, formed by engraved concentric circular lines, is filled with engraved dots or punctations. The central element is a four-pointed cross-hatched cross with a circle and dot forming the center.

In addition to these two gorgets, there are two others that are known from AAS/HSU station photographic records but are not curated by the Survey. A plain shell gorget was photographed in 1974 by Ann Early during documentation of local amateur Hoy Furr's collection (Figure 4). This gorget reportedly came from a burial at the Moore Mound site (3CL56). Moore, like Bayou Sel, lies on the Ouachita River. Part of one mound remains today where there were once three mounds and associated cemetery and residential areas. While no professional archeological excavations have taken place, artifacts noted from the site indicate a Mid-Ouachita to Social Hill phase occupation (A.D. 1400-1650). The marine shell artifact illustrated has an irregular circular shape with some breakage around the edges, and has two drilled suspension holes. There is no visible engraving or decoration. According to notes provided by Furr, this gorget was found in a child's grave that had been dug by Furr and Gene Hudnall in "House site #3" at Moore in 1974.



Figure 4. Plain shell gorget from Moore site, Furr Collection (AAS/HSU slide 1333).

In 1973, Ann Early photographed an engraved shell gorget in the Grant County Museum that was reportedly from site 3GR8 (Figure 5). This Grant County site near the Saline River was first recorded in 1961 as a mound and midden damaged by road construction and looting. In addition to the shell gorget, a Hempstead Engraved bowl also attributed to 3GR8 was photographed at the Grant County Museum, suggesting a Middle Caddo period (A.D. 1200-1400) date for the site. The small shell gorget or pendant has a notched or serrated edge and engraved double hand motif. Portions of the finger areas have broken away. Early described the gorget as having an eye-in-hand motif, although circles/crosses or other decoration on the palms of the hands cannot be seen in the photograph. Hand-shaped gorgets are unusual; Brain and Phillips (1996:446, 490) illustrate one from Spiro (see also Brown 1996:595, Fig. 2-134c) and one from Castillian Springs in Tennessee.



Figure 5. Engraved shell gorget or pendant from 3GR8, Grant County Museum Collection (AAS/HSU slide 1092).

The engraved design of the Shepherd gorget is similar to another example from Clark County from the Kirkham site (3CL29, Clark County) described in a short Arkansas Archeologist article by Meeks Etchieson (1981). Kirkham, in the Little Missouri River drainage, is a multicomponent site with Archaic, Woodland, and Mississippian (Caddo) period materials noted. A mound had been reported at the site but was leveled during the 1960s. The Kirkham gorget was a surface find but assumed to be associated with the Caddo occupation at the site. It measures 10.8 x 10.5 cm and is irregularly circular in shape. As described and illustrated by Etchieson (1981:1, 3), this shell gorget has scalloped edges and a series of engraved concentric circles or bands, two of which have dots or punctations. In the middle is a curved line "swastika" with a central cross in circle. The Kirkham gorget has also been illustrated by Brain and Phillips (1996:414), and described as a variant of the scalloped triskele or Nashville style. The differences seen by Brain and Phillips (1996:121) include the 4-armed motif ("tetraskelion") rather than the 3-armed triskele, the central cross-and-circle, and the two pitted or dotted bands separated by a plain band rather than an "ophidian" band made up of pitted circles arranged in a pitted background. The Kirkham gorget, with its scalloped edge, concentric bands with dots, and central curved-line element, is very similar to one from the Sam Kaufman site (Texas) that was found in a shaft grave dated to 1300-1500 A.D. (Skinner et al. 1969:98). It also resembles certain East Tennessee engraved gorgets. Sullivan (2007) places the Dallas site examples, including the 'scalloped triskele' or Nashville style gorgets, in the A.D. 1350-1450 time frame.

Two engraved shell gorgets were described and illustrated by C. B. Moore (1912:599-600) from Burial No. 10 at the Foster Place (3LA27, Lafayette County) on the Red River. Foster had two mounds, one of which had burials that were dug by Moore. Based on associated ceramics, Foster Place was included (with the last two occupations at Belcher Mound) in the Belcher Focus by Webb (1959, now termed Belcher phase, ca. A.D. 1500-1650). Other marine shell from Foster described by Moore included shell beads, disks, ear ornaments, and *Busycon* shell cups, one of which had an engraved decoration. Both of the Foster gorgets are circular in shape, engraved on the shell interior, have paired suspension holes, and have fenestration in addition to engraved decoration. One has been described by Brain and Phillips (1996:121) as a variant of the triskele category, but has spaced scallops around the outer edge, each with a circle and pit or dot, a band of

engraved diamond shapes with pits in the "ophidian" band, and a fenestrated 4-armed "tetraskelion" with an engraved central circle and pit. The second Foster gorget is described by Brain and Phillips (1996:35) as a variant in the cruciform category. The central motif is a fenestrated cross with engraved lines and dots or pits with a central circle and pit. The cross is surrounded with engraved circles with pits. Towards the outer edge are a series of engraved or cut triangles with perforations in them. Webb (1959) highlighted engraved shell from both Foster and Belcher as examples of Southern Cult.

One marine shell gorget was excavated from the Mineral Springs site (3HO1, Howard County). It is described by Bohannon (1973) as a conch shell gorget measuring $12.0 \times 10.9 \text{ cm}$. "The surface was badly weathered but a simple design of closely set parallel lines traversing the specimen could still be discerned," (Bohannon 1973:59). The decoration is not clear on the illustrated artifact, but one perforation can be seen (Bohannon 1973:Fig. 17m). The gorget was excavated from Burial 12, Mound 6, by Clarence Webb in the 1950s. Burial 12 was a large pit with two skeletons and grave goods that indicate Mineral Springs/Haley phase deposition (ca. A.D. 1300-1400; Bohannon 1973; Hoffman 1983).

The marine shell gorgets from Caddo sites in southwest Arkansas are few in number, but point to some interesting issues in terms of the timing and routes of shell goods exchanged across the Southeast during the Mississippian period. The shell gorgets described here from sites in southwest Arkansas were excavated from burials, where context is known. The timing of deposition was during the Middle Caddo period (A.D. 1200-1400) for the Mineral Springs gorget and probably also for the Grant County Museum gorget, but during the Late Caddo period (A.D. 1400-1600) for the Bayou Sel, Moore Mound, Shepherd, and Foster Place gorgets.

In a discussion of marine shell beads found in Ozark bluff shelter excavations in northwest Arkansas, Hilliard and Harcourt (1997) conclude that those examples were deposited between A.D. 1000-1350 and evidence connections with the Spiro mound center to the west. Certainly large numbers of marine shell artifacts have been found at Spiro. But marine shell has been uncovered at other sites in the southern Caddo area, beyond Arkansas. Twenty-one marine shell gorgets were found at Sanders, a Middle Caddo period site near the Red River in east Texas (Jackson et al. 2000). Two engraved shell gorgets were found at Sam Kaufman, another Red River Valley site, probably dating to the Late Caddo period (Harris 1953; Skinner et al. 1969). And one engraved shell gorget was apparently found at the Historic Caddo period (A.D. 1680-1860) Clements site in northeast Texas (Perttula et al. 2005). One engraved/fenestrated marine shell gorget was excavated from the Late Caddo period Belcher site in the Red River drainage in northwest Louisiana (Webb 1959).

This short article is intended to publish descriptions and photographs of two marine shell gorgets from Caddo sites in Clark County, Arkansas, that are curated by the Arkansas Archeological Survey. In addition, photographs on file at the AAS/HSU station provide information about two gorgets from Clark and Grant counties that are in other collections. Summary descriptions of several previously published gorgets (from Kirkham, Foster, and Mineral Springs) are provided as well. Marine shell gorgets are relatively rare in southwest Arkansas. *Busycon* shell cups (most undecorated) seem to have been a more frequent form of marine shell in grave contexts in this region. And the small engraved zoomorphic pendants found at several Belcher phase sites seem to me to have been a local form of shell art.

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TWO CATLINITE PIPE FRAGMENTS FROM THE WOMACK SITE, LAMAR COUNTY, TEXAS

Jesse Todd

Abstract

Two catlinite pipe fragments from the Womack site in Lamar County, Texas are discussed as well as other catlinite pipe fragments on Caddo sites from Northeast Texas.

Two catlinite pipe fragments have been recovered from the Womack site (41LR1). A stem was recovered by A. T. Jackson and a bowl by R. K. Harris and others. The site is located on a high bluff overlooking the Red River in Lamar County, Texas, and probably was occupied somewhere between AD 1700 and 1730 (Harris et al. 1965).

Jackson (n.d.:3) found an unusual catlinite pipe on the surface of the Womack site and describes the pipe stem as bearing a thin knob 5/8 inches long and 3/8 inches high with three notches on its edge and a small hole at its base (Figure 1). He further states that the pipe is of the same form or type of catlinite pipe used by the Sioux.

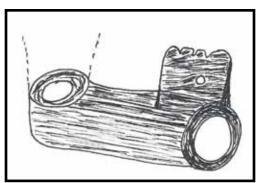
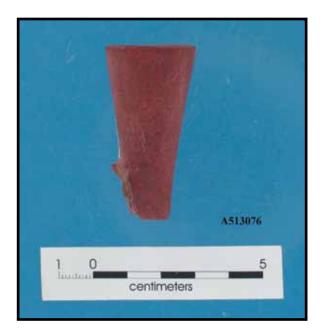


Figure 1. Catlinite pipe stem found by A. T. Jackson on the surface of the Womack site. Illustration from A.T. Jackson's notes provided by Ms. Laura Nightengale of the Texas Archeological Research Laboratory, The University of Texas at Austin.

The bowl that Harris et al. (1965:297) recovered during their testing of the site is shown in Figure 2. The bowl is 51 mm in long and the rim diameter is 26 mm (James Krakker, June 2008 personal communication). The pipe fragment probably is associated with the calumet because the pipe was made from red stone (catlinite) that forms a right angle elbow (Blakeslee 1981:763; Hall 1987:30). Blakeslee further states that catlinite pipes have a projecting prow but Brown (1989:325) illustrates calumet pipes that do not have the projecting prow.

According to Harrington (1920:271), the Caddo received Bénard de la Harpe at four villages along the Red River in 1719 with the calumet ceremony. Harris et al. (1965:357-360) provide evidence that the Womack site was one of the villages visited by la Harpe. The presence of French trade goods at the site tends to support that conclusion. Gilmore (1996:1-2) also discusses the presence of La Harpe at Caddo sites along the Red River, while Middlebrook (1994:32) and Perttula et al. (2004:96) discuss the use of the calumet by the Caddo.



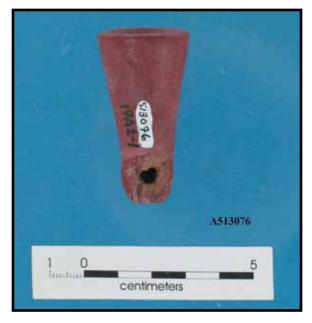


Figure 2. Catlinite pipe fragment from the Womack site. Left, profile of pipe bowl; Right, view from where stem would have been. Photo courtesy of Dr. James Krakker of the Smithsonian Institution.

At least two other catlinite pipe fragments have been discovered on historic Caddo sites in East Texas. A stem fragment was recovered from the Roseborough Lake site (41BW5) site in Bowie County, Texas (Miroir et al. 1973:124), and a bowl was recovered from 41H065 (Figure 3) in Houston County, Texas (Perttula et al. 2004:96-98). The catlinite pipe fragment from 41H065 was analyzed using mineral spectroscopy and the results indicate that the pipe was made from catlinite found in quarries at the Pipestone National Monument in southwestern Minnesota.

The pipe stems from the Womack and 41H065 sites are similar, except for the nature of the thin knob. The knob from 41H065 is irregular and angled whereas the one from the Womack site is square with three angled cuts.

It cannot be stated categorically that the catlinite pipes from the Womack site are calumet pipes. They simply may have been a trade item for personal use. However, the calumet ceremony was used by the Caddo and therefore, the pipes may have been a part of that ceremony. Hopefully, further archaeological investigations will uncover more evidence of the calumet ceremony in East Texas, thus providing additional evidence of interaction between the French and Caddo.

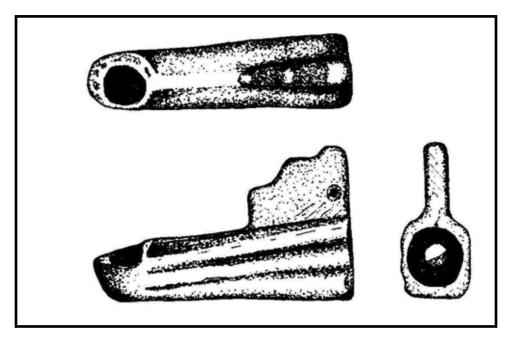


Figure 3. Catlinite pipe fragment from 41H065 (Perttula et al. 2004:98). Image reproduced courtesy of the Texas Archeological Society.

Acknowledgments

I would like to thank Dr. Tim Perttula for his patience, information, and help in preparing this paper. Also, I would like to thank the Texas Archeological Society for permission to use the illustration of the catlinite pipe from 41H065, Dr. James Krakker of the Smithsonian Institution for the photographs, and Laura Nightengale for the illustration from A. T. Jackson's notes.

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CLAY PIPES FROM THE TUCK CARPENTER SITE (41CP5) CAMP COUNTY, TEXAS

Jesse Todd and Robert L. Turner

Abstract

In this paper, four clay elbow pipes are described from the Tuck Carpenter site (41CP5) in Camp County, Texas, and compared to clay pipes from other areas.

Introduction

The Tuck Carpenter site (41CP5) is located approximately 3.19 miles east of downtown Pittsburg and overlooks Dry Creek in Camp County, Texas. The site consists of at least 45 Caddo interments that date to the Titus phase. The site yielded a calibrated 2 sigma radiocarbon age of A.D. 1473-1635 (Perttula 2005:Table 11-2). Based upon the presence of a stemmed, Caddo-produced ceramic chalice or goblet from Grave 33, Turner postulated that the cemetery's terminal date may be a few years past the de Soto expedition, which was lead by Moscoso into Texas in 1542. Turner (1978) was able to divide the burials into two components, Early and Late. Perttula (1992:112), however, was able to determine that three subphases were present.

During the excavation of the burials, seven clay elbow pipes were recovered (Turner 1978:73), four of which are in Mr. Robert Turner's possession. The pipes are from Graves 15, 23, 25, and 26. In this paper, the pipes are described and compared to pipes from other sites in northeastern Texas as well as other states.

Discussion

The measurements for the pipes are presented in Table 1. The location where the measurements of the pipes were taken is presented in Figure 1. The pipes are shown in Figures 2 and 3.

Grave	a	b	c	d	e
15	36	36	32	25	15.5
23	50	37.5	31.5	26	16
25	50	34	28.5	23.5	17.5
26	4.4	30	31	30	18

Table 1. Clay elbow pipe measurements (in mm).

Chronology

Perttula (1992:248-249) compared the presence of arrow point and pottery types from Titus phase cemeteries in the Cypress Creek Basin. Based upon the co-association of specific arrow/pottery types, he was able to divide the Titus phase in the Cypress Creek Basin into three temporal periods with several subphases. At the Tuck Carpenter site, Period 2 consists of subphases a and b, which range in age from ca. A.D. 1450 to 1600. Bassett and Maud arrow points are the major arrow types, while a variety of pottery types such as Wilder Engraved and Ripley Engraved are present at that time. Period 3, subphase c at the site belongs to the "Classic" Titus phase and probably dates after ca. A.D. 1600. Talco and Maud arrow points characterize this period, especially the Talco type.

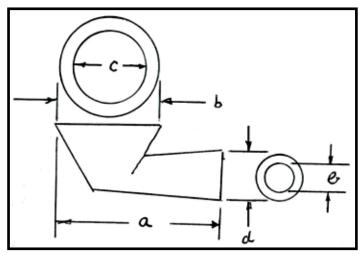


Figure 1. Location of pipe measurements.

Table 2. Arrow and pottery types and periods and subphases associated with pipes (Turner 1992; Perttula 1992:112).

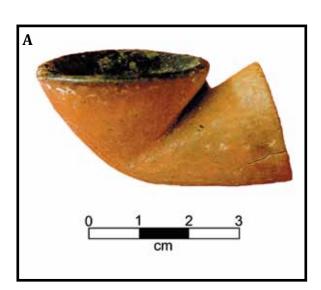
Grave	Arrow and Pottery Types	Period/subphase
15	4 Ripley Engraved bowls, 1 Maydelle Incised vessel, 3 Perdiz arrow points	2, a
23	3 Ripley Engraved carinated bowls, 2 Ripley Engraved compound bowls, 1 La Rue Neck Banded vessel, 1 Aver Engraved Red bottle, 2 Ripley Engraved jars, a square Ripley Engraved vessel, 7 Maud arrow points, 8 Perdiz arrow points, 7 Basset arrow points	-
25	3 Ripley Engraved carinated bowls, 2 Ripley Engraved Compound bowls, Wilder Engraved bottle, 2 Talco arropoints, 1 Perdiz arrow point	3, c
26	2 Ripley Engraved carinated bowls, 2 Bullard Brushed vessels, 1 Avery Engraved vessel	Unknown

Comparisons with Other Sites

Biconical and keeled pipes are found throughout the Caddo area in Arkansas (Moore 1909; Wood 1981), Louisiana (Moore 1909; Jones 1984) and Oklahoma (Wyckoff 1979; Finkelstein 2000). In Texas, Jackson (1933) provides an overview of pipes from East Texas but there are numerous other sites containing both styles of pipes. Keeled elbow pipes retain some of the characteristics of the Red River pipes (Hofman 1967:10). The projecting stem edge of the Red River pipe was turned up to join the distal end of the bowl, and in some cases, the keel was highly conventionalized.

More specifically, the biconical pipe shown in Figure 2B is similar to an elbow pipe recovered from the Roitsch site (41RR16) in Burial 30 in Red River County, Texas (Perttula 2008:373). The pipe also is similar to one found at the Keno Place site in Louisiana (Moore 1909:128). The slightly angular pipe illustrated in Figure 2A closely resembles a pipe found in Burial 4 at the Horton site (41CP20) in Camp County, Texas (Hunt et al. 1996:F-11).

Although a specific keeled elbow pipe comparable to the one from Grave 25 (Figure 3B) was not found in the literature, a pipe similar to the one in Figure 3A is illustrated from Bowie County, Texas by Biggs and Malone (1970:Figure 65).



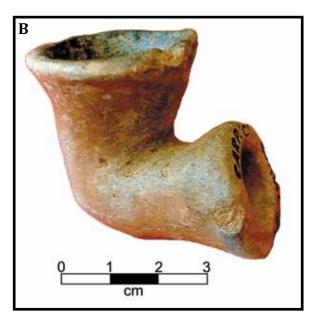
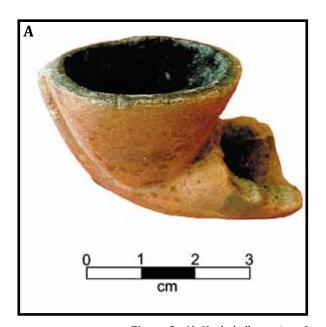


Figure 2. A) Slightly angular elbow pipe from Grave 15. B) Biconical pipe from Grave 26.



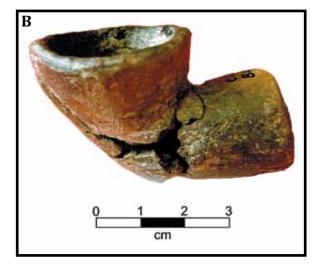


Figure 3. A) Keeled elbow pipes from Grave 23. B) from Grave 25 at site 41CP5.

Conclusions

Pipes found at the Tuck Carpenter site (41CP5) probably range in age from ca. A.D. 1450 to the post-1600s. With such a time span, pipes could have been traded from or copies made from any of the above discussed sites.

Acknowledgments

I want to thank Dr. Timothy Perttula for reviewing several versions of this paper.

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PROCEEDINGS OF THE NINTH CADDOAN CONFERENCE, FEBRUARY 4 AND 5, 1966, NATCHITOCHES, LOUISIANA

Edited and with an Introduction by Timothy K. Perttula

Introduction

This volume of the *Caddo Journal* (CJ) presents an edited transcript of the proceedings of the 1966 Caddoan Conference, the 9th such Conference (Davis 2009), held in Natchitoches, Louisiana on February 4th and 5th. Several of the proceedings from early (5th, 7th, and 8th) Caddo Conferences have been previously published (Davis 1961a, 1961b; Davis et al. 1971a, 1971b). Krieger (1947) and Bell (1952) also published accounts of the very earliest Caddo Conferences, the first (1946) and third (1952), respectively.

Participants identified in the typed transcripts of the 1966 Caddoan Conference include:

Richard Ambler

Tom Barr

Robert E. Bell

Jay Blaine

Charles Bollich

Iames A. Brown

Iames A. Ford

Sherman Gagliano

Jon Gibson

Pete Gregory

James B. Griffin

William G. Haag

R. King Harris

Michael P. Hoffman

Edward B. Jelks

Burney McClurkan

Clarence H. Webb

Stephen Williams

Unfortunately, there are several unidentified participants on the typed transcripts.

Other than minor grammatical and stylistic changes, the majority of the editing involved the deletion of those portions of the session where there were extraneous comments on non-Caddo subjects, the recording quality was poor, and many remarks were unintelligible or only at best partially recorded (unfortunately, in a wide-ranging discussion of the American Formative by James Ford [1969], or the sessions turned to an examination of slides and other visual aids; without reproducing those images (the locations of which are unknown), the discussions make little contextual sense. I have added selected key references as footnotes throughout the text to direct the reader to the published reports, where the definitive findings from much of the 1966 session discussions can be found. The originals of the typed transcripts have been deposited with the editorial offices of the *Caddo Journal*, the new face of the CAJ as of September 2008, at Stephen F. Austin State University in Nacogdoches, Texas.

During the Conference, there were two main sessions per day. On February 4th were presented reports on current research in the Caddo area, or related areas, including reports by Michael Hoffman, James Brown. Tom Barr, and Robert Bell. Dr. Clarence Webb presided over this session. The second session had presentations/ discussions on problems relating to the southern part of the Caddo archeological area, including early pre-A.D. 900 sites in the Caddo area, the origins and extent of sandy paste pottery, and cultural relationships with lower Mississippi valley groups. Burney McClurkan, Clarence Webb, and Ed Jelks had specific presentations on different archeological investigations underway in and around the Caddo area. Pete Gregory presided over that session, with help from Ed Jelks.

On Saturday, February 5th, the third session was presided over by Ed Jelks. Following a report on the excavations of a 19th century trading post on the Verdigris River in northern Oklahoma (not included here), there was an extended presentation by Jay Blaine on 18th century trade guns found on Indian sites in Texas.

The fourth session, presided over by Clarence Webb, included a short consideration of the possibility that there was a movement or diffusion of ideas into the Caddoan area overland from northern Mexico (see White and Weinstein [2008] for the latest thinking on connections between Mexican cultures and aboriginal groups living in the U.S. Southeast, including the Caddoan area). The principal focus of the fourth and concluding session was a discussion led by Stephen Williams on the lower Yazoo and upper Tensas basin cultural sequences, and the relationships (as seen primarily in decorated ceramics) between lower Mississippi valley archeological cultures (especially Coles Creek) and the Caddo. This last session then concluded with a discussion of sand-tempered and sandy paste pottery found in the Caddo area and in other parts of the southeastern United States.

Now, to the 1966 Caddoan Conference.

Acknowledgments

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First Session, Clarence Webb, Presiding, February 4, 1966

<u>Clarence Webb</u>: If you don't mind, I'll be informal. Our plan generally has been to have reports from around the area on the first morning. It looks as though there is enough going on in the area that probably the entire first day will be involved in this—an opportunity to bring each of us up to date with what is going on around the four-state Caddoan area. And I think we can start off this morning with some of the materials from several states that fit in very nicely together, involving mostly the early Caddoan period and transitional periods. I think this afternoon we will group together some of the later material. A good deal has gone on in the past year in contact historic sites.

To begin with, we'll ask Mike Hoffman, who is almost the sole representative from the University [of Arkansas], if not the sole representative of the sovereign state of Arkansas. Mike has reports of work that he has been doing, and possibly some from other parts of the state.

<u>Mike Hoffman</u>: I'd like to announce, first of all, that from the last two Caddo conferences we have mimeographed the field reports...There is quite a bit of useful information in them.

The past year has seen quite a lot of activity in the Caddo area as far as the university and people in Arkansas are concerned. I'd like to say a few words about a portion of the northern periphery of the Caddoan area as that has been defined previously. This limit is usually drawn at the valley of the Arkansas River, except not in the eastern part of the valley. In February through March of this year, a portion of this periphery was surveyed for the [National] Park Service. As part of the Arkansas River project, the Corps of Engineers is building a number of dams and locks, and I surveyed a portion from about Ozark, Arkansas, approximately 25 or 30 miles downstream from Fort Smith, and the reservoir potentially could extend to within 5 or 6 miles of Fort Smith. This area could be potentially fairly important in terms of culture history; in fact, the whole central part of the valley could be. At the eastern end of what I call the central part of the valley in Arkansas there is the Mississippi embayment around Little Rock. At the western end, there is the big Caddo site of Spiro; one would expect, if there was movement back and forth between these two areas—the Arkansas valley which cuts between the Ozark Plateau and the Boston Mountains on the north and the Ouachita Mountains on the south—that this would be an avenue of movement. This area had not been surveyed before, and we were expecting some large sites. We did not find them, which is interesting in itself. The valley in the portion which I surveyed is narrow, with not a great deal of alluvium. The mountains on both sides come very close to the river.

Not very much archeological work has been done in the area. Surveys by Moore and Thomas extended up the river only about as far as Little Rock. Moorehead did a survey of the Arkansas River valley but did not do much except discuss artifacts from the portion which I surveyed. In the 1920s and 1930s around the area of Dardanelle there was a great deal of commercial pothunting and huge cemeteries were dug up, mainly by tenant farmers. The only description we have of this is a somewhat appalled description by Harrington. The museum [University of Arkansas Museum] has inherited one way or another many of the pottery vessels from these excavations, and they are interesting because generally speaking, they seem to combine some ceramic traits of Caddoan and middle Mississippian.

The Ozark survey covered an area upstream from these large cemeteries¹, however, and we did not find evidence of sites such as these. Fifty-nine sites were located; first, and perhaps most importantly, we did not find any mound sites. And there were no sites indicating an intensive Caddoan occupation, with one possible exception. We related the surface material to a sequence which was set up for the Ozark area by Marshall in Missouri and Bartlett, McGimsey, and Ray Wood in Arkansas. In terms of their stage formulations the valley floor contained no sites of what are called Archaic I and II stages. Archaic I is essentially a Dalton occupation. This was not present as far as we know in the survey area, in the alluvium. Archaic II, which in terms of projectile points would be Big Sandy or Marshall of the White River Archaic, and a point type called Johnson by Bartlett. This was also absent from the valley, and the first major occupation was in the Archaic III

¹Michael P. Hoffman (1977, editor) *Ozark Reservoir Papers: Archeology in West-Central Arkansas,* 1965-1970. Research Series No. 10. Arkansas Archeological Survey, Fayetteville.

stage, which could also be called Late Archaic. The sites were almost exclusively on natural levees and were quite common. The point types here were Williams, Bulverde, Langtry, Ellis, and Yarbrough; I do not believe they necessarily co-existed, although we have no evidence just on surface surveys of finer distinctions.

The early ceramic stage is another stage formulation which was made by McGimsey and the people who have worked in the Ozark area. We did find quite a number of sites of this stage. It has been characterized very generally on the basis of clay-tempered pottery and Gary dart points. In this portion of the valley, it was very widespread; enough data were accumulated to provisionally define a complex which I call the Gober complex. It is pretty obviously related to the ceramic portion of the Fourche Maline focus which was postulated for eastern Oklahoma. The sites of the Gober complex are large and have midden apparent on the surface. Daub is present on several sites. Perhaps at one of these sites there was once a mound; certainly there is an area of different colored soil and scattered fragments of burials. But it has been plowed down if it was present. The three key artifacts of this complex are the narrow, pointed-stemmed Gary projectile point, a spade made of argillite which is rectangular, usually with a polished bit, and clay-tempered pottery. Decoration when it is present—it is very rare on this pottery—consists of parallel straight incised lines, chevrons sometimes, and cross-hatched incising. And as far as fitting in with descriptions of Fourche Maline, it does well.

On the survey we found just a few sites of what is known in the Ozark area as the late ceramic stage, which you find simply by arrow points and shell-tempered pottery. Only one fairly pure component was found very close to the western edge of the reservoir area, near Fort Smith. This is a burial site. One burial has been excavated which contained 24 isosceles triangular-shaped arrow points, a long blade, and no pottery. The pottery that we picked up on the surface of the site is shell-tempered and decorated commonly by incised line-filled triangles; noding, appliquéing, and red filming are also present. There is some notched appliqué which Jim Brown has seen and he says it is typical of the Spiro focus, or it is present in the Spiro focus. It would probably pay to excavate this site for our definition of this late ceramic stage. One sherd from a bottle shape was found also at the site.

We planned some excavations for the survey, particularly to further define the Gober complex and to find a good late ceramic site, if we can, in the survey area. It was, in terms of expectations, flatly disappointing because we did not find any large mound sites. I think part of this is due to the nature of the terrain which even now is not particularly encouraging to agricultural peoples, unless you like to live on the side of a hill.

I'll move into the Millwood Reservoir archeology and more to the heart of the Caddoan area. Most of the museum's work this past year was in the southern part of the Caddoan area below the Ouachita Mountains. Besides talking about our work, I am also going to discuss further work at Mineral Springs. A large cemetery has been excavated there, which has not been discussed at a Caddo Conference. Also, some work has gone on this last year at a large mound site on Red River, the Bowman site.

Millwood Reservoir is on Little River, a tributary of Red River. The dam is to be located about 10 miles above Fulton, Arkansas, and potentially could effect an area almost to the Oklahoma line; it is a very large reservoir. Survey work was done on it by Jelks in the early 1950s, and the museum has been excavating during summers since 1961. The National Park Service also had a large project at the site of Mineral Springs.

Eight weeks were spent in the field this summer doing salvage archeology there. One week was spent in further excavations at the Hutt site, which Jim Scholtz tested in 1961 and on which I made a report to this conference; I did an analysis for the National Park Service last year.² To reiterate what I said last year, this site showed an occupation dominated ceramically by a sandy paste pottery which I call Bois d'Arc Plain and also an occupation which had some pottery with Coles Creek decoration. There was some indication that this Coles Creek pottery increased in quantity from the bottom of the midden to the top. I rather hesitate to call anything Coles Creek with so many experts here today. What we call Coles Creek might be slightly different in the Caddoan area from what you are calling Coles Creek elsewhere, and this is a point of discussion.

² Michael P. Hoffman (1970) Three Sites in Millwood Reservoir: The Hutt Site, The Stark Site, and the Beard Lake Site, Arkansas. Research Series No. 2. Arkansas Archeological Survey, Fayetteville.

We wanted to confirm this year what Jim Scholtz found, so we decided to spend some more time at the Hutt site. Unfortunately, it has been turned into a public use area, and the only area available for excavation was an island of unmolested soil in the middle of the parking lot interspersed with picnic tables and barbeque pits. We did excavate a week and we got a further sample of materials. Also unfortunately, it was not in the part of the site with the deepest depth of accumulation, and so we did not get any kind of trend in ceramics. It had been used previously as a camping area so there were many modern refuse pits too. We did recover more Coles Creek and Bois d'Arc pottery and Homan projectile points—which is in good association with Coles Creek in the Caddoan area—and a few Gary projectile points, too, which I am tending to associate on the basis of other evidence with Bois d'Arc pottery.

We also returned to the White Cliffs site³ which Jim Scholtz had also excavated in 1961. It is the second largest site in the reservoir—second to Mineral Springs—and at one time had six mounds on it. Jim had dug a house mound or a mound built over a burned structure in 1961, and we dug another one very close to his excavation, and it was the same type of thing. The structure under this mound was very poorly defined. Its outline could be traced mainly on the basis of the extent of the burned area and occasionally charred posts resting in place, and it was approximately 4 x 5 m, rectangular with rounded corners. There was an extended or sloping entrance to the east, with many of the posts burned in place. There was no fireplace in the structure, and no artifacts could be associated confidently with the floor level. Underneath the floor there was approximately 0.5 m of occupational debris. I have not analyzed this material yet, but from my first impression it has the same content as the one which Jim Scholtz dug containing thin, long-stemmed pipes and such types as Holly Fine Engraved and Crockett Curvilinear Incised; so it is early Caddoan, at least.

We also tested Mound 6, the largest mound there, but found it was too disturbed in most parts to make extensive excavation practical. In this mound there was a cap of clay over a midden approximately 60 cm in depth in parts which had not been disturbed by sporadic excavations since 1900. We do have a fairly tight context on material not disturbed by plowing. The portion of the village north of the mounds was also excavated. The midden was about 60 cm thick here, and a good portion of the midden debris was obtained although there were not any structural indications. There were also five burials in this area of uncertain affiliation. One was a cremation while the four others were extended inhumations. There were no pit outlines discernible, and as far as we could tell these burials were right under the midden. Grave goods occurred with only two of these. One of them had a platform ceramic pipe. It is not like the platform pipes at Belcher, but it does have the notching on the side of the stem which are present on a Belcher pipe. The other burial with grave goods was a double burial. It had a kit of tools consisting of bone awls, a sandstone abrader, numerous flint tools such as scrapers and knives, plus 14 projectile points which are quite heterogeneous, including mainly Scallorn points but also including a Yarbrough and Gary dart points, which perhaps means this was a point collector at that time.

The third site we excavated this summer was the Millers Crossing site. It is at the mouth of the Cossatot River, a tributary of Little River. When Jelks located the site in the early 1950s, it was untouched in dense timber with no excavation at all. It had never been plowed. It is a site with two mounds and an undetermined amount of village area.

In the winter and spring of 1965 local amateurs from Texarkana and Ashdown located a cemetery at the site and excavated it. It was the only area of the site which was halfway clear. It was in a logging road. Fortunately, one of these excavators recorded information about this cemetery and submitted a report to the museum, and we have also photographed almost the entire contents of the cemetery, and we have it by burial. Eleven burials were recorded from this cemetery. All but one of these burials were in rectangular pits which varied from about 1 to 10 ft. in depth from the ground surface. One burial was double, and the rest were single burials. From this cemetery there were 14 pottery vessels that we know about, some projectile points, and thin long-stemmed pipes. Pottery types were Crockett Curvilinear Incised, which was the most common type; Pennington Punctated-Incised, which was second in frequency; next, with apologies to the Coles Creek area specialists, Hardy Incised—what we are calling that in the Caddoan Area—and an engraved red-slipped

³Michael P. Hoffman (1971) A Partial Archeological Sequence for the Little River Region, Arkansas. Ph.D. dissertation, Department of Anthropology, Harvard University, Cambridge, Massachusetts.

water bottle. I would be interested in comments on its affiliations. A Pease Brushed-Incised jar and several undecorated vessels were also present. The projectile points were a wide-stemmed variety of Alba. Speaking generally, this seems to be, in terms of the Caddoan sequence, a very early Caddoan site.

At this site we also excavated a portion of a burial mound (Mound 1). It stood about 7 ft. in height and was about 60 ft. in diameter. These burials were all in pits and originated from at least two surfaces. One of these was pre-mound in the old ground surface, and the others appear to be all from a primary mound. There were several cases of intrusions of one burial over another in this mound; interestingly enough, the latest two burials in terms of intrusions had associated Pennington Punctated-Incised and Hardy Incised and wide-stemmed Alba points; the other late burial in terms of intrusions had Holly Fine Engraved and Hickory Engraved bottles, a linear pinched jar, and a small quartzite celt. The pre-mound burials were oval instead of rectangular, and there were only two of them. One of these had grave goods: a single undecorated jar with a square base and flaring rim.

Speaking generally, this site shows a very early Caddoan occupation in some ways—with exceptions of the Pease Brushed-Incised, perhaps, and the red-slipped bottle—equivalent in time to Alto focus sites. It is as close to a pure component of this that we have in this area right now. The other mound at the site, judging from the potholes in it, appears to have been a mound erected over a burned structure. There is a floor visible and it shows burning.

Although the museum did no work on Mineral Springs, the largest site in the reservoir, in 1965, there is some additional information to report. Fred Bohannon of the National Park Service finished his report and submitted a copy to the museum. His excavations were mainly in Mound 6 and 8, but he concentrated on Mound 6. One of the functions of this mound was for burial, and Bohannon reports about 20 burials, including three excavated by Dr. Webb and some excavated by Glen Kizzia of Texarkana. There are other burials from Mound 6 excavated by [Joe] Shurtleff and [Cleatus] Thomas, 16 to be exact, which the museum is accumulating the information on. Although the mound had been greatly disturbed, Bohannon was able to isolate at least two significant strata from which burials were put down. One of these was pre-mound, and the other was a primary mound, Stage I. The rest of the burials were from unknown points of origin because the mound had been greatly disturbed by soil removal and a silo trench right through the middle of it.

To summarize, the pre-mound burials he affiliated with an Alto focus occupation. They included a thin, long-stemmed pipe and pottery type such as Carmel Engraved, Hickory Engraved, Dunkin Incised, Pennington Punctated-Incised, and a plain red-filmed vessel. Stage I burials, as far as Mound 6 goes, were what he called Alto-Haley transitional and included pottery types related to both foci. From Stage II, or the upper surface of the mound, through seriation and the use of stratification, he was able to isolate several other occupations at the site: the latest one, Texarkana focus; the one earlier, Haley-Texarkana transitional; a Haley focus occupation; an Alto-Haley transitional; Alto focus; and finally an Archaic occupation underneath the mound. This whole site is a key to the area.

In addition, in 1963 and 1964 Joe Shurtleff and Cleatus Thomas found and completely excavated a cemetery of 35 burials a few ft. northwest of Mound 6. They labeled it Cemetery I, but since Harrington found two smaller cemeteries at the site, I am calling it Cemetery II. All of the cemetery was found by scraping off the top soil before excavation. It was a very complete job, and they have compiled a plan view of the cemetery which is very good as far as showing locations and intrusions. The cemetery, from at least my impression of looking at the vessels and talking with them, seems to be mainly of one time period, except for three burials. There was a total of about 240 pottery vessels with the types Haley Engraved, Haley Complicated Incised, and Glassell Engraved being most common. Also present were Handy Engraved, Hempstead Engraved, East Incised, Sinner Linear Punctated, Pease Brushed-Incised, Crockett Curvilinear Incised, and one seed jar. Points were mainly of the Hayes type and a variety of Hayes which in local usage is called the Crickett variety. This is a point with the Hayes diamond-shaped stem and usually seriations with a needle point to it. It is very common at Mineral Springs and also it is present at the Bowman site and other Haley focus sites. Pipes were thick and

⁴C. F. Bohannon (1973) *Excavations at the Mineral Springs Site, Howard County, Arkansas*. Research Series No. 5. Arkansas Archeological Survey, Fayetteville.

long-stemmed. There were a number of effigy vessels in the cemetery, mainly associated with child burials. There were also three celts in the cemetery and one blade. The cemetery appears to be related to Bohannon's Mineral Springs 4 and 5, which is the dominant occupation of Mineral Springs. Shurtleff and Thomas are preparing a report on the excavation. All the material Joe Shurtleff has, and it certainly is a contribution to our knowledge of that site.

The other newsworthy work that has been going on since the last conference is the excavation at the Bowman site (3LR50), also known as the Wallace site. The Bowman site is a major Caddoan mound group with at least eight mounds, a village, and three cemeteries. It is on the north side of the Red River very close to the Oklahoma line. For some 25 years, Pete Miroir and his group have been excavating in the three cemeteries and have removed at least 75 burials. They also excavated two burials in one mound at the site. The bulk of this material is at the University of Arkansas Museum as are the field notes. This last summer and fall, two of the mounds at the site, both burial mounds, were completely excavated by several people in Texarkana. Shurtleff and Thomas have compiled records of these excavations and are working with the University in recording through photography and analysis all of the material which came from the site.

The burials from the mounds had very many and fancy grave goods which compare well in quantity and quantity with the material Moore got at the Haley place. The major excavation went on at Mound 1 by Shurtleff's terminology, but in terms of Miroir's nomenclature it is Mound 4. This mound was about 8 ft. high and 23 burials were found in it. This mound showed a good deal of stratification in terms of primary mounds, and the burials can, with good assurance, be related to these different primary mounds at points of origin. They were all pit burials. Three burials appear to relate to the first primary mound, which is a very low one, and these burials had no ceramic grave goods, unfortunately. However, Agee and Homan points were present as well as a single blade with a deep, concave base. At Crenshaw, these Agee and Homan points are strongly associated with what we call a Coles Creek occupation, and I believe that it is possible that at Bowman these stage I burials are also of this affiliation. In the fill of the mound were found some Coles Creek Incised sherds.

Stage II of the mound was another primary mound with possibly three sub-stages visible in the profile. A number of burials originated from these surfaces. One of these contained Homan and Agee points and, possibly in terms of time, would relate to the earlier sub-stage, while the other burials had Pennington and Crockett pottery vessels, Alba points (not typical because they have a wider stem and sometimes more bulbous-looking stem). On the upper sub-stage of the 2nd primary mound were four burials. We do not know much about the ceramics at this level, although there were some in the mound. As with Moore's description of the Haley site⁵, there were not single pottery vessels but layers of pottery, and 3 ft. deep. Probably in some graves 50 or more vessels were included, and all were thoroughly crushed. We do know that in the upper sub-stage of Stage II there were bulbous-stemmed Alba points and a thin, long-stemmed pipe plus one petaloid celt.

Most of the burials originated from the surface of the 3rd primary mound. Pottery vessels are known to include Crockett Curvilinear Incised. If you page through Moore, this is the period in which there are huge Crockett bowls. A slide of one from Bowman looks bushel basket-sized; they are very large things. Perhaps this is the most common pottery type at the site. There are also Holly Fine Engraved or Spiro Engraved, Haley Complicated Incised, and Pease Brushed-Incised vessels. Other grave goods included Hayes points of the Crickett variety, some side-notched points, many celts with these burials, the recurved Copena blades, copper pins and celts, galena, and thick long-stemmed pipes. From this 3rd stage there was at least one soft limestone effigy pipe.

From the present surface of the mound there were three burials (I should say the burials from almost all layers in this mound were large circular ones. Part of this may be due to the nature of the soil, which is sand, and the Caddo may have also had cave-ins. There is some indication of this). The three burials in the present-day mound surface are the ones with the most elaborate grave goods. There were over 1200 Hayes points in one cache in one grave, and really fancy material—copper-covered ear spools, another limestone effigy pipe, and a copper axe.

⁵C. B. Moore (1912) Some Aboriginal Sites on Red River. *Journal of the Academy of Natural Sciences of Philadelphia* 14(4):482-638.

Mound 2 in Shurtleff's terminology was a much smaller mound. It was about 2 ft. high and only six burials were found in it. These burials also occurred from at least two levels. The University of Arkansas Museum has photographed everything except some of the ceramics from this mound. As far as projectile points, all these burials except one had quantities of Hayes points. Pottery types included Haley Engraved, and some fairly atypical-looking Kiam, Hardy, and Dunkin Incised. The pipe type was a thick, long-stemmed variety, and blades and celts in large numbers accompanied most of these burials. One burial, Burial 6, was extremely deep. From the surface of the mound it was 18 ft. deep; from where it began, it was 16 ft. deep. It was near the permanent water table and for this reason some wooden artifacts were preserved; that is, worked wood. We do not quite know the function of the several pieces present; they have been modified. Joe Shurtleff, I think, would like to call them bows, but I do not agree right now. Copper-covered ear spools were with one burial and fragments of copper with others. One burial (Burial 2), had an engraved conch shell bowl with a serpent motif very similar to those illustrated in Plate 15 of Duffield (1964); it is so similar, in fact, that one could say it might have come from Spiro.

It is obvious that this Bowman site was an important center in the area, and the Museum anticipates a great deal more time spent in its analysis. Shurtleff and Thomas are preparing a report on the excavation at the site, and we are trying to figure out a way that we can employ a student to help with pottery restoration.

I should also say that there is a very late occupation at the site, represented in cemetery materials, by pottery types such as Natchitoches Engraved, Nash Neck Banded, and Avery Engraved. Pete Miroir thought at one time there might be burials there with European contact materials, but none have been found so far. Just from the look of things from the material at the site, there are many types of pottery vessels which do not fit any established typology, and new views may come out of the analysis of the materials at this site.

There is one other project which I would like to mention. The University of Arkansas Museum has accumulated over the years quite a number of unpublished data from sites in southwestern Arkansas, some from WPA excavations and some from the excavations of Pete Miroir, and the materials and notes from those excavations. Most of this material is burial data. One of our graduate students, Peggy Hoffman, is utilizing this material and other material for her master's thesis which will be concerned in constructing a seriation of the grave goods from these sites. We all know the variety of pottery which accompanies many Caddoan burials as well as the non-ceramic materials, and with such cases the stratifications as are present or the presence or absence of trade goods as a beginning to structure the seriation: potentially, a very accurate one can come about. We do not have an absolute chronological control or one that is on a firm basis yet in the Caddoan Area, but I think that through seriation of grave goods we perhaps can get good relative control. We anticipate a sample of at least 500 burials from southwestern Arkansas in this study.

Webb: Questions?

Hoffman: I can explain (and accompanied by a chronological hand-out) a little bit about these phases in the Little River region. They are based on Millwood Reservoir archeology, mainly. What I am calling the Hutt phase is dominated by sandy paste pottery and Gary projectile points. The Old Martin phase is a cemetery which was excavated by Pete Miroir and others. It has a good Coles Creek occupation with such vessels as French Fork Incised, Coles Creek Incised, Greenhouse Incised, some of which have intrusions through them by early Caddoan materials. Millers Crossing is the mound and cemetery site which I mentioned today. It appears to be fairly early Caddoan with an Alto focus equivalent except for a few questionable items. Graves Chapel is the site I reported on last year. It has an occupation exemplified best by one burial there with such pottery types as East Incised, Hickory Engraved bottles, Pennington Punctated vessels, a mixture in one quiver of projectile points of Alba and Hayes points, and is equivalent to one of Bohannon's Mineral Springs occupations, and it is Alto-Haley in terms of focus designation. The Mineral Springs phase is exemplified best by the cemetery which Shurtleff and Thomas have excavated. In the Little River region proper, there are no well-defined later phases, although at Mineral Springs there was at least one burial which showed a Texarkana focus affiliation.

Webb: Any good reason to put Hutt between A.D. 400-700?

<u>Hoffman:</u> When I wrote the analysis, I looked around for similar sandy paste pottery, and I know it is fairly widespread through the southeast and Texas, and it is also present in some sites of the Fourche Maline culture or focus. The reason I put it at this time level was at the site there were no sherds which showed any stamping decoration. I was looking for evidence, if it had been earlier, of Woodland or Hopewell affiliations, and there were no sherds of this type there. But this is a wide-eyed guess as far as establishment by C14 dates. The Old Martin phase, again, is just a guess as far as location. I am sure that a A.D. 700 to 1000 time period is much too wide, and the site would fit a very much shorter time period.

Intermission

<u>James Brown:</u> I have a few results which I would like to give here at this conference and expand upon what I had said at the previous conference in 1965. I am by no means through with the analysis but I do have a few items of general interest which I will introduce here, and they can be used for later discussion.

For those of you who are not familiar with the site, when I talk about the Spiro site I talk about the site as a whole, which is a mound group consisting of the Craig mound, which is a large conjoined structure; the large Crandall [Coppel?] mound; a smaller platform mound; four buried house mounds of the type very common in the Caddo area; and two mounds in which burials have been interred. We know very little about them, unfortunately, and there is an occupation area distributed between these mounds. When speaking of the Spiro site, we have to remember there was a very long occupation at the site and that the Craig mound itself appeared to encompass almost all the phases of occupation except for the very scattered Archaic one found in the hills.⁶

I might introduce this talk by outlining what I think are the phases that are represented at the Spiro site, and characterize them briefly with certain artifacts which are commonly found here and other areas, and divert attention from the ceremonial items used to indicate status. I think that will help us focus on those items which identify the people and their handicrafts rather than the items which serve to indicate what kinds of formal interaction was taking place over the entire Southeast.

The first phase is one that Orr has set up called the Evans phase or focus,⁷ and the evidence for this comes from one of the small primary mounds located underneath the Craig mound. And the associations there are very enlightening. A number of pottery types called Williams Plain, and one that I have called LeFlore Plain, and then decorated styles which serve to link this area of the middle Arkansas with the lower [Mississippi] valley, such as French Fork Incised, and something very similar to Coles Creek Incised, and maybe East Incised. These are similar to lower valley decorative motifs but the ware is different, and there are a few other differences which may eventually be the basis for the erection of an entirely different series of incised decorated vessels. I might add that Greenhouse Incised is included, too.

Williams Plain consists almost entirely of jars and incidentally they are practically molded for this particular type. Both round and square bases occurred. I might point out that throughout the middle Arkansas valley, the indigenous pottery always has [these kind of] bases on it, whether it is a jar or bowl, with the exception of the very earliest bowls. And it served in a way to identify those items which belong with the middle Arkansas valley and those that were introduced, especially from eastern Arkansas. There are a number of decorative styles: French Fork and Greenhouse. These decorated pieces are highly burnished and have black cores. The sherds themselves are linked with a plain ceramic called LeFlore Plain, which also has a very similar polished exterior. And this occurs not only in jars but also in bowls, and as far as I can see, it is an analogous type to something in the lower [Mississippi] valley called Coles Creek Polished Plain.

⁶see James A. Brown (1996) *The Spiro Ceremonial Center: The Archaeology of Arkansas Valley Caddoan Culture in Eastern Oklahoma*. 2 Vols. Memoir No. 29. Museum of Anthropology, University of Michigan, Ann Arbor.

⁷Kenneth G. Orr (1946) The Archaeological Situation at Spiro, Oklahoma: A Preliminary Report. *American Antiquity* 11:228-256.

A number of blades, notched blades, are found in the Evans phase. I call them Kay blades because most of them are made out of Kay County flint. They have shallow notches at the very end of the blade and the chief variation is introduced by the shape of the blade, which can be ovate, leaf-shaped, or ovate with a straight base and the notches are placed at the very end so that the result is that you get quite diverse forms. There is one case where you get something that looks almost like a turkey tail, but it is not. Boatstones, as far as we can tell, both the standard form with the keel and the effigy style, belong in this phase. There are some arrow points which I have called Sequoyah. They are a very distinctive expanding base point, often with very heavy serrations on the blade. It is possible that some of the other styles that are current throughout the Caddo area are also found during this phase, such as Agee, Alba, etc.

There appears to be another phase which is very close to the material reported by Dr. Bell from the Harlan site,8 and tentatively we offer the Harlan name as the handle for the phase. There is a great deal of material that turns up in the collections that belongs to this phase, and it seems that a lot of the digging was in areas presently used as a burial area during this time. But, fortunately, there is a small primary mound at the north end of the Craig mound complex. It is solely of this phase, and we find here LeFlore Plain; we find examples of Smithport Plain, enough to look like they are Alto trade wares; the paste is very distinctive and very different from the indigenous paste; Spiro Engraved, Hickory Engraved; there is a rectilinear engraved example which I have not named at all; Williams Plain appears to be in use at this period; and it appears that there are other items like Woodward Plain, the shell-tempered jar form, and styles such as Pennington and Crockett. And I suggest, although I cannot demonstrate it, that the sherd of what I call Poteau Polished Plain and the single sherd of Holly Fine Engraved also fit in this phase. The points I have identified are Agee—there is a good association with a large quiver-full of several of these—the Cahokia notched point, made out of Crescent flint; there are Reed, Catahoula, Morris, Alba, and several new types and sub-styles which I have called Sequoyah, Bokoshe, and Sallisaw. This is a period in which the burial behavior exemplified at the Great Mortuary, phase B, has already become well established as far as I can tell. Let's say the burials are meager and the evidence is not what we need to demonstrate this point.

The Bokoshe double-notched form occurs in several burials with other points. The Sallisaw also has a long blade. A very similar point with a different blade is the Sequoyah. There are quite a number of styles represented in the graves at Spiro and not all of them can be so readily singled out under a name. But I hope to describe them in such a way that the material can be compared with other material. It is also evident that under such broad designations which really relate to the kind of haft of the point that there are a number of styles, for instance, the Agee, which might have a number of different kinds of blades, is essentially a basallynotched point. You can see that in caches. You can have quite a number of different sub-styles within the one type, and I suggest that these come from different localities. Eventually, they can be narrowed down to particular regions and particular socio-political groups. Agee belongs to the class which includes Catahoula but evidently differs in dimensions and proportions. Sallisaw belongs in a similar class with Alba, because these are sub-varieties in which the base is almost straight, but unlike good Alba points, the base is never retouched. In the Alba points that I have seen, the one crucial difference is that this area has been retouched, either forming a bulbous base or a straight flat base, or straight with pointed base, and so forth. But there is evidence that quite a number of different sub-styles are actually grouped under particular type names, and perhaps we can get some good information from some of these caches which will illuminate particular kinds of sub-styles. At any rate we have plenty of evidence at Spiro that the variability exists.

The third unit, Spiro phase or focus, accounts for at least 66% of all the graves that were recovered by the WPA and in that sense it is certainly the dominant occupation at the Craig mound, although we do not really know what was destroyed in the tail of the mound. The types here are Woodward Plain, the shell-tempered jar form, almost exclusively. I have been able to break down the shell-tempered material into several types based on surface finish. There is also a companion type which I call Woodward Applique. It occurs with appliqué nodes, often clusters of this sort, or surrounded by a notched appliqued strip of clay. It also occurs even more commonly as a couple of strips; clay added to the mixture produces the knots. These often occur in pairs and are distributed on four sizes of the vessel.

⁸Robert E. Bell (1972) *The Harlan Site, Ck-6, A Prehistoric Mound Center in Cherokee County, Eastern Oklahoma*. Memoir 2. Oklahoma Anthropological Society, Norman.

Woodward Plain shapes are very much like Williams Plain, so the culinary complex really remains remarkably stable, the major difference being the substitution of temper which, as Dr. Bell has pointed out, presumably is a gradual process of substitution during this second phase. But by this time period which would be identical to phase B and later units within the Craig mound, the culinary wares are usually shell-tempered and only some of the nicer bowls and bottles have clay or sherd and grit tempers used in them. By paying attention to the surface finish I have been able to segregate out something which I call Poteau Plain, which is a slipware, used advisedly since the identification of slips is hazardous. In any case, it has what looks like a separate layer added to the original shell-tempered body. The temper is very fine and is associated almost solely with bowls. It is very, very common in the graves. It often occurs in company with Sanders Plain and, in fact, they look very much alike superficially. They share the same shapes, same proportions.

Webb: Is the slip ever colored?

<u>Brown:</u> Yes, it occurs as both red, dark brown, or black. In fact, it occurs not only in those colors but about every color in between, which suggests that the firing control is not very good, although this may be deliberate too. There are vessels in which you get black on the inside rather than on the outside, blotches of red against black, speckles and marbling, which seem to point to very poor control. This is also the case with the Sanders Plain which I have delimited as the red-slipped sub-class within Krieger's Sanders Plain. This is very useful for me because the unslipped does not occur very frequently at Spiro.

At this period there are also Spiro Engraved and Hickory Engraved types. All told, their frequency would tend to point to their being resident types at the site, although this might be subject to later emendation. Certainly, shell-tempered ones and Spiro Engraved were resident to the area. Now, there are numerous trade items and these occurred not only in the Great Mortuary of phase B but also the later burials. There are ovaloid bowls which would be currently classified in the type Old Town Red and are different from Sanders bowls in shape more than anything. The ovaloid bowls do not have a flat base. They are convex, whereas Sanders Plains always has a flattening of the base, sometimes very flat, other times not so marked. There are sherds of red on buff, there is at least one negative painted effigy bowl, and then there are others like the Bell Plain hooded effigy bottle. There are also a couple of vessels of Neely's Ferry Plain and a Nodena Red on White teapot-shaped bottle. There are seed jars, maybe Poole Plain, Haley Engraved, Friendship Engraved, something which I think is Glassell Engraved, Hempstead Engraved, Hodges Engraved, and a variety of the Nash Neck Banded. This long list is illustrative of the diversity of trade items represented at the site, coming not only from the Red River valley but also from eastern Arkansas and beyond. And if the materials were in better condition, I suspect that even longer lists could be compiled.

The projectile points at this time are the same as the previous one as far as I can tell. There are Washita points in some of the graves, and it is notable that there is only one Fresno. In all the collecting that was done at the site, only two triangular points have been found there and both of them were found during WPA excavations, one in one of the graves and another in the village area, out of thousands upon thousands of points. So, it is pretty evident that either they had no access to these particular points or else this particular style or type of the notched or simple triangle form was not even being made in that general region, not even to the west or east.

Following the material there at the Craig mound, there are other occupations not represented there but found in the surrounding bottomlands and hills, of what Orr called Fort Coffee. Now, I hope to be able to isolate and describe some of this material and pin down what really is Fort Coffee and how it differs from what I have set up at Spiro. There are suggestions that this is a different complex which includes a few items which are either absent or very rare at the Craig mound: including an incised form of Woodward in which filled triangles are found on the shoulder, or the design called in some areas alternating triangles. All told, this has a very late context elsewhere and would appropriately delimit something like Fort Coffee. There is also a type found on jars, again, in which the shoulder area, or the area between the rim and the shoulder, is filled with fingernail punctations on end, and the general appearance is one that duplicates the appearance of Nash Neck

⁹Alex D. Krieger (1946) *Culture Complexes and Chronology in Northern Texas, with Extensions of Puebloan Datings to the Mississippi Valley*. Publication No. 4640. The University of Texas, Austin.

Banded, only there are quite different techniques used. The vessel form is very much like Woodward Plain and quite different from the southeastern Oklahoma Nash forms. I have called this tentatively Braden Punctated. It holds an analogous position in the ceramic complex that Nash does further south. The area below the shoulder is often filled with incised lines and other decorative motifs, and there is a constant recombination and opposition of the two areas: the neck and shoulder.

There is a hint that the bottle complex now changes. Starting with the earliest evidence found in the second phase, we have standard Gibson-type bottle forms with a conical spout and a globular or near-globular bottle. Towards the end of Spiro in some of the very latest graves, there is a tendency for the neck to become straighter, and in certain Fort Coffee sites, Spiro decoration—and decoration which is no longer a part of what I have restricted at Spiro, makes its appearance on the bodies in conjunction with cylindrical necks. In fact, the decoration at this point resembles Hatchel Engraved and Avery Engraved to a remarkable extent; if this hunch holds up, it appears that this very standard form which makes its appearance in the second phase, continuing on into the Spiro focus, now undergoes a drastic alteration which is now in line with ceramic bottle forms in the Red River valley. This is very important because all indications from the trade material points to this Spiro phase or focus as existing very late, at least A.D. 1400, and I might even put it well up into the succeeding century, although we must wait for C14 dates to base much of an argument on the actual age. But at any rate we have here in the middle Arkansas valley the maintenance of earlier Gibson forms in the bottles at a time when the Red River had undergone a shift into Fulton forms It is very important, and Spiro's not unusual. There is every indication that the rest of the middle Arkansas valley is participating in the same kind of development. Very standardized forms apparently make their introduction here continuing well on into the 15th century.

At the close of the Spiro period, which is conveniently marked by the abandonment of the Craig mound, there is an alteration in the culture that would be interesting if we can relate it reliably to the village sites. This is not as easy as it seems because in the village sites all we get are the culinary wares. In fact, the polished stuff is very infrequent, bottles almost non-existent. Moreover, and this is a further complication, the occupation there at Spiro belongs to this period, not to the Spiro phase itself. There is virtually no shell-tempered pottery in the occupation area. The houses are the rectilinear-quadrilateral four-post kind with or without an extended entrance.

I would anticipate that at this period there would have been a shift to a different house, a quadrilateral form with two center posts, although this remains to be documented or really argued. I might have a unique opportunity to test this idea because there are plans afoot to convert the Spiro site into a park, and if the plans go through as expected, there will be some reconstruction of the Craig mound and possibly some of the other mounds. This would entail grading away the earlier location in order to find the precise location of the mound, and at this point we might find evidence of structures underlying the Craig mound itself. I particularly think the Great Mortuary, which is indeed very large, would have post holes extending well into the subsoil, well beneath the WPA trenches.

Getting back to the Fort Coffee material, there are items which we might assign to this period, such as Avery Engraved, Blakely Engraved, and Nash Neck Banded, that would be indicative of trade into the Red River area. And then there is some indication of a 5th phase or occupation and this is comprised of Woodward Plain, again, also bowls with incurving rims. This is something new, and the decorated motifs are very much like Womack Engraved and the vessel form is too. It has a carinated shape and a slipped surface with pendant cross-hatched triangles. This is shell-tempered, and there is every indication that this is basically the same ware that we find represented in Poteau Plain. All indications would be typologically that this would be extremely late, and there is one association with a Hudson Engraved water bottle which would confirm that assignment. There are also some beads which have been identified as turquoise, small blue-green beads, and that would comprise, perhaps, a very late occupation, way into the A.D. 1600s.

If there are any questions of what happened to the Spiroans, I think it lies in the sequence that is found right there in the Fort Coffee area. There is every indication that there is a complete sequence from the very earliest ceramic times, probably even earlier, all the way up into the A.D. 1600s at least. There are many

points of continuity in formal types and in the shape of the vessels, the way they were used, that indicate and corroborate this continuity. Holdovers of such things as Spiro Engraved and Hickory Engraved also indicate this. To the extent that we can argue from the diversity of arrow points, there is another line of evidence for indicating continuity. Agee and Morris are by far the most numerous points at the site, and I would suspect that they are resident point forms.

The material identified with the ceremonial aspects of the culture are distributed mainly in phase B, and this is the area of the Great Mortuary. This is a very unique situation in which a large floor area on which remains of litter burials and deposits of various kinds were allowed to accumulate in place. Instead of disposing of them, they were allowed to remain in place, and the mound was erected right on top of the deposit. The materials were so loosely consolidated, evidently, that when they finally shook down, a large cavity (not a central tomb, as has been romantically put forth as an interpretation of the mortuary and its contents) remained above them and this cavity kept them from being crushed and kept percolating waters from completely destroying the material. When the WPA dug in the mound and dug around the area labeled the central chamber, they found evidence of the floor; they found evidence of the same kinds of burials that were found inside the chamber, and they cut across burials. Now, there are materials dealing with the ceremonial life and indicating status at this period, but the bulk of the items belong with this period, mainly because this is when the most intensive mound building activity occurs.¹⁰

<u>Unidentified:</u> I get the impression that the Spiro period there lasted five years on the basis of the fact that you have village occupation for your Harlan phase and you haven't got any for Spiro, so this must have been done very quickly, then.

<u>Brown:</u> I think the occupation was not there. I think it is to the north and west. The village sites that have been identified as Fort Coffee are at least in part Spiro.

With the mound, not only do you have a large accumulation on the mortuary floor but you have at least 12 mound stages covering it. Evidently we have no evidence of structures at all in the WPA excavations because they used a slicing technique. There is, first, the mortuary, there was a mantle, then a mound was placed over it which, because of the distribution of burials at the periphery and at the top, is a pyramidal mound—a quadrilateral base pyramidal mound, and there are several stages connected over it, and presumably there was some sort of structure on top.

<u>Unidentified:</u> Is this your Harlan phase?

Brown: No, this would be during the Spiro phase.

Webb: On the slopes, don't you have burials which are associated with this post-ceremonial period?

Brown: Right. Many of the same items that occur in phase B occur there: same kind of symbolism, the same kind of behavior.

There is also now a copper plate that belongs in a later burial which is one of these diamond-shaped ones showing the warrior in profile. Instead of having a standard ear spool, it shows a masked head. There is a big crest and the standard triangle. It is very interesting to study these copper plates because no two of them are the same, and they show different kinds of warrior dress. Crests, different kinds of spools, different kinds of hair buns, and some have pins in them, different kinds of facial decorations. Most of them show a weeping eye, a number of them show eyelashes or eyes, or hair over the eyes and foreheads, and their hair design is often made into a double bun.

¹⁰James A. Brown (1966) *Spiro Studies, Vol. 2. The Graves and Their Contents.* University of Oklahoma Research Institute, Norman. See also James A. Brown (1971) The Dimensions of Status in the Burials at Spiro. In *Approaches to the Social Dimensions of Mortuary Practices*, edited by J. A. Brown, pp. 92-112. Memoir No. 25. Society for American Archaeology, Washington, D.C.

Webb: We'll break at 12:30 PM, so now to Tom Barr.

Tom Barr: We excavated three sites in the Webbers Falls area in east-central Oklahoma, from Webbers Falls up to Okay, Oklahoma, on the Verdigris River. The first site was 34MS52, in which we uncovered two rectangular houses with two central roof supports and a central fireplace, but there was no evidence of an entranceway on these two particular structures. Other features at the site were basin-shaped refuse pits from which we recovered two different types of ceramics: red-filmed, shell-tempered ware and a thin-walled clay-tempered ware; no rims or bases, just body sherds. Point types are of the Reed and Morris forms, and also we recovered two burials with no grave furniture, flexed children, and no evidence of a pit outline. All of the features were uncovered at 1 ft. below the surface. The second site was an Archaic site (34MS50) represented primarily by Gary, Williams, Marcos point types, flaked bifaces, spatulate hoes, side scrapers, core tools, hammerstones, and pitted nut stones. The third site was the Three Forks trading post.

Webb: These two pottery types, the red-film shell-tempered and the clay: all plain?

Barr: All plain.

Webb: The site with the rectangular houses, was that at or near Webbers Falls?

Barr: That was on the gorge side of the river a few miles north of the falls, right above lock and dam 16.

Robert Bell: I would like to make one or two comments about work done by Don Wyckoff at Broken Bow Reservoir and Pine Creek; he has excavated a variety of different kinds of sites. 11 Prior to his work we had essentially just McCurtain focus sites in that area, so some of his findings are of considerable interest. For example, he has apparently a series of Archaic or pre-ceramic occupations. Some of them are apparently fairly early and some of them apparently come up to about the time when pottery is first appearing. There is an occasional example of early types of points (such as Plainview or the Meserve-Dalton complex) from some of the sites, so I think once he has his report completed, we will know a bit more about the Archaic assemblages in this area. The relationship of them appears to be with the Fourche Maline materials further to the north in part and also to the La Harpe aspect materials in Texas towards the south. The ceramic varieties are already indicating that there is considerable time depth to what we have called McCurtain focus, and I think that we will be able to separate out at least an early McCurtain and the late McCurtain.

One other interesting aspect is that the Woods Mound group, ¹² a series of some six or seven mounds, still on top of a high bluff fairly far up the river valley; these are very small mounds, not very high, most of them 1.5-2 ft. in height. Wyckoff excavated these and most of them indicate that they contain a buried and burned structure. These have produced, for the most part, late McCurtain focus types—Simms Engraved, for example—and late forms. I find it rather interesting to find the continued utilization and construction of these mounds here and well up into late times. One other thing that is impressive about the Woods mounds and that is the overall feeling of paucity as far as these people are concerned. You have a feeling that they are back off in the back country and not really participating in many of the events that were going on elsewhere. Very poor rural cousins, perhaps, to some of the developments that were taking place further to the south

Second Session, Pete Gregory, Presiding

<u>Pete Gregory:</u> I'll turn the floor over to Dick, and he can introduce the Texas folks and see what they have on the agenda for the day.

¹¹Don G. Wyckoff (1967) *The Archaeological Sequence in the Broken Bow Reservoir Area, McCurtain County, Oklahoma*. University of Oklahoma Research Institute, Norman, and Don G. Wyckoff (1968) *The Bell and Gregory Sites: Archaeological Chronicles of Prehistory in the Pine Creek Reservoir Area, Southeast Oklahoma*. Archaeological Site Report No. 11. Oklahoma River Basin Survey Project, University of Oklahoma, Norman.

¹²Don G. Wyckoff (1967) Woods Mound Group: A Prehistoric Mound Complex in McCurtain County, Oklahoma. *Bulletin of the Oklahoma Anthropological Society* 15:1-76.

<u>Dick Ambler:</u> I thought I might mention that we are going to start learning more about the fringes of the Caddoan area fairly soon. Last year we conducted salvage operations in the Forney and Bardwell reservoirs up near Dallas and reports on these will be out in several months. Last year we also conducted operations over in Toledo Bend Reservoir. And early this fall, we had a salvage operation going on in the Livingston Reservoir on the Trinity, and this is fairly close to the Caddoan area.

Burney McClurkan: I will tell you about Livingston Reservoir in about 25 well-chosen words.¹³ Ceramically, this whole area seems to be dominated by a crude sandy-paste pottery with an orange color which we have called "fat orange." From private collections in the area and also from the sites we have excavated, we have found some engraved pottery which has not been classified, but decorated pottery is in a minority, a decided minority. Engraved sherds are extremely rare. There, punctating, incising, and brushing seem to be the predominant surface finish. The Gary is the dominant dart point, and the Palmillas and Kent are also present. The arrow points include Alba, a few Perdiz, and some Catahoula, and some with little expanding stems (Colbert). This past season four sites were worked on, and they all appear to be reasonably coeval.

<u>Unidentified:</u> Do you find any clay paste or clay-sherd-tempered sherds, or is it entirely confined to sand?

<u>McClurkan:</u> I would say that over 90% of it is this plain sandy paste pottery. There is some bone temper and some grog.

Webb: What about the bases?

<u>McClurkan:</u> The only complete vessel we found had a conical base. It was a plain pot about 10 cm across the orifice and 10 cm deep.

There does seem to be some connection with the Caddoan area with some of the engraved pottery, and also from collections I saw some sections of carinated bowls. In the excavations I found nothing that would indicate carination.

Now I want to discuss recent work at the Coral Snake mound at Toledo Bend Reservoir. There was a fire pit about 4-5 ft. below the top of the mound. The date from the fire pit is A.D. 300. There was a cache pit—the only one found—that had a boatstone down at the bottom of it. This was about 0.5 ft. across and a little over 1 ft. in depth. The boatstone is almost identical to specimens from the Crooks site¹⁵ in material, dimension, and form. There was also a cache of ear spools, identical in form and size to the materials from the Crooks site. There was also a mass of fibrous-looking material with a couple of human teeth. We cut the whole block of the material and got it back to the lab and cleaned it and found a copper bead (weighing 111 g), of a drilled nugget type, and about 20 drilled raccoon teeth that were right underneath this.

Unidentified: Was this some woven material?

McClurkan: It looks like leather.

There were also two clusters of human bones, representing two or three individuals.

<u>Unidentified:</u> What sherds did you get?

¹³Burney B. McClurkan (1968) *Livingston Reservoir, 1965-1966: Late Archaic and Neo-American Occupations*. Papers of the Texas Archeological Salvage Project No. 12. Texas Archeological Salvage Project, The University of Texas at Austin.

¹⁴Burney B. McClurkan, W. T. Field, and J. Ned Woodall (1966) *Excavations in Toledo Bend Reservoir,* 1964-65. Papers of the Texas Archeological Salvage Project No. 8. Texas Archeological Salvage Project, The University of Texas at Austin. See also Harald P. Jensen, Jr. (1968) Coral Snake Mound, X16SA48. *Bulletin of the Texas Archeological Society* 30:9-44.

¹⁵James A. Ford and Gordon R. Willey (1940) *Crooks Site, a Marksville Period Burial Mound in La Salle Parish, Louisiana*. Anthropological Study No. 3. Louisiana Department of Conservation, Baton Rouge.

McClurkan: Of the 82 we have, we got part of a Marksville Stamped vessel.

Unidentified: Cross-hatched rim?

McClurkan: No.

Gregory: What sort of rim does it have?

McClurkan: It was flat, and had triangular punctations around it.

Gregory: Underneath the rim or on the lip?

McClurkan: Underneath it. The rim was thin.

The mounds I'm discussing (Jonas Short¹⁶ and Coral Snake) are about 70-80 ft. across and 7-8 ft. high. In both mounds, there was a scattering of cultural materials throughout the fill, but I know specifically at Coral Snake the majority of the material was within the inner mound, all the features that we plotted (some 14), of bone groups, the cache pits, other caches of artifacts, and about 23 other lots of bones, 18 of which were human. We have somewhere in the neighborhood of 25 people represented in the mound. All of this material was found below 4 ft. from the top of the mound, and it was within a 15 ft. radius of the center. At Coral Snake the entire mound is homogeneous throughout. There was no soil differentiation from top to bottom, but the placement of material within it would certainly imply a two-unit construction. The only artifact that was found outside of this small unit was one pot sherd that was found about 2 ft. above it.

From the copper deposit at Coral Snake we got the bead that I mentioned, five other beads. Another gorget was round and had little cuts at the edge. All in all, there were 10 such cuts; not much of the original was left. This had feather imprints on it, preserved in the copper salts. We found one item of quartz at Coral Snake, a pendant. It was anthropomorphic, polished, and engraved.

In both the Coral Snake and Jonas Short mounds, there is a marked similarity to the Marksville culture: including the duplication of the copper artifacts, the boatstones, and the Marksville Stamped vessel. Also in the late Tchefuncte you get a two-stage mound with a small pit in the center to receive the primary burial. This was found at the Jonas Short site. At Coral Snake, the center of the mound was disturbed by aggressive ants. We did come across some bones in the middle, but we got rained out, and we did not get to investigate and clean the area off, and then we had to go home. But I have no reason to doubt that these are human. They were located below the level of the floodplain which would certainly suggest that a small pit had been dug, not much below it. The two stage construction was inferred by the cache pit and the distribution of artifacts, but throughout both these sites were also sherds of a Caddoan nature, one sherd we got of Holly Engraved in the fill, another engraved sherd that is non-typeable. At the Jonas Short site there were a number of sherds that Ed Jelks connected with the Angelina focus, but now the way it was in the Jonas Short site and the way it looks to have been at the Coral Snake mound, this material was in the fill that they used to build the mound so I wonder how this affects the relationship of the Caddo to the lower Mississippi. Has there been any revision lately on the comparative chronology of the two?

<u>Webb:</u> This site that I am going to show in a little bit adds to the available information. I think we will have to think of that bone-tempered pottery as beginning well before Caddoan, so that bone temper will not be enough to say that this is Caddoan.

<u>Stephen Williams:</u> There is a very fine line decidedly at the Marksville site itself, probably a very fine line.

<u>James Ford:</u> I think to some degree that you people are still suffering from the interpretation of the Davis site and the early radiocarbon date. I think that this had a blighting effect upon us.

¹⁶Edward B. Jelks (1965) The Archeology of McGee Bend Reservoir, Texas. Ph.D. dissertation, Department of Anthropology, The University of Texas at Austin.

<u>Gregory:</u> What was the context of these big polished blades at the Jonas Short and Coral Snake mound sites with the rest of the Caddoan area? They do not occur within Marksville, do they?

Webb: They look like Archaic blades.

Gregory: There are a few of them from Poverty Point, I believe.

Webb: There are half a dozen fair-sized blades with polishing on the base.

<u>Gregory:</u> They are pretty common in local collections all through this hill country of northwest Louisiana and central Louisiana. They are fairly well polished blades very similar to those Burney showed us. Frequently over here they're stemmed instead of corner notched. The peculiar grooved quartz crystals at Jonas Short looked like they might have wanted to make a plummet out of them. They are very large crystals, and they are fairly common here, and come primarily off of non-ceramic sites. I hesitate to say pre-ceramic.

<u>Williams</u>: It seems to be fairly clear that everybody's willing to take early Caddoan as no earlier than A.D. 900. Consideration of these sites should be connected with the lower valley in terms of C14 dates we have there. There have got to be some Indians around here between A.D. 1 and 900, so why isn't this relating to that? This happens to be an enigmatic period in much of the Southeast, from the time of Christ to A.D. 900.

McClurkan: Now to the Salt Lick site at Toledo Bend Reservoir.¹⁷ This was a very small midden about 100 x 70 ft. The midden was quite distinct. It went from about 1 ft. to, in some places, 2 ft. in depth and you could tell within 5 ft. when you were out of it. There were two groups of burials, and they all had grave goods in them. It appeared in these specific burials that the pots were put in there in sets because, not only in type but also in vessel form, each of the graves produced a set that was similar to all the other burials. Out of two of these there was pottery; one burial had a vessel on either side of the pit. One of them was Pease Brushed-Incised and the other one was Natchitoches Engraved. The other burials, this flexed group, had small vessels, and they looked like they had been made by a child. Jelks also found some flexed burials at McGee Bend with grave goods. I have not been able to find any other indication of this in the literature for this area, the Caddoan area. I found the flexed burials with grave goods of what appeared to be a late type, so it looks like we have an area where there is a peculiar burial arrangement. There is no indication of any long occupation at the site, so there is no change in the distribution of material we talked about and everything looks late.

Gregory: Dr. Webb, do you want to talk a while about your Resch site?¹⁸

<u>Webb:</u> At the Conference last year, I showed an illustration of a vessel of Tchefuncte Stamped. A few eyebrows were raised, so I brought the vessel with me this time, and I find still that eyebrows are being raised, so I would like for the doubting Thomas's who say that this is not Tchefuncte Stamped to tell me what it is.

I have had the privilege during the past year of working with three amateur archeologists from Marshall, Texas: Mr. and Mrs. Murphey, Ellis, and Green, who had found the site on Potter's Creek—I do not know any better name for a good pottery site—which runs directly into the Sabine River just before it makes its bend to flow southward between Texas and Louisiana. This is in Harrison County, and only about 20 miles from the Louisiana line, so that at least in invading Texas from Louisiana, I did not cross the line very far.

The Resch site has been interesting because it has raised some problems but I think also gives some added light on just exactly what Steve Williams was saying a moment ago, that there is something to fill the gap between the Tchefuncte-Marksville sequence and the beginning of the Caddoan sequence, or between A.D. 400-900. I suspect, Steve, that you would not accept the A.D. 850 date this Conference agreed on last year?

Williams: Yes, that sounds fine.

¹⁷see McClurkan et al. (1966):27-56.

¹⁸Clarence H. Webb, Forrest E. Murphey, Wesley G. Ellis, and H. Roland Green (1969) The Resch Site, 41HS16, Harrison County, Texas. *Bulletin of the Texas Archeological Society* 40:3-106.

Webb: A.D. 850.

This site is where Potter's Creek flows directly southward into the Sabine River. The Coral Snake mound is downstream, about 30 miles southeast of the Resch site, on the Louisiana side of the Sabine River. The Jonas Short mound is about 30 miles west of Coral Snake, in the McGee Bend area of the Angelina River drainage.

The site lies on a terrace, probably a Pleistocene terrace, about 10 ft. in elevation above the rather narrow floodplain of the creek. The floodplain, on the opposite side of the stream, is only about 1/4 mile wide. Apparently this site has been cleared and in cultivation for many years. It is a few acres in size, and all around it the hills rise rapidly as you get out of the valley.

We had many volunteers when the work first began. As it went along and we produced an average of 10 artifacts for each 5×5 ft. square cut down 4.5 ft. deep, the enthusiasm waned somewhat, but I must say for these people from Marshall that they have done a very good job of keeping at it with the encouragement we have given. Although they were not getting many artifacts, they were getting some information that probably will be of value, and they have now completed some 115 squares, taken out by 6 inch levels, and down to 4.5-5 ft. in depth. The bottom two levels have comparatively little material. Even the women thought to join in the digging and add color; they worked out in the open sun. The men take things a little easier in the shade. So enthusiastic has this group been that even the family dog joins in the archeology and enjoys the cool dirt down around 3 ft. deep, just about at the level where the Tchefuncte pot was found. And my favorite archeologists at this site are Mrs. Webb and my two grandchildren.

There is about 1 ft. of topsoil, which is dark. There was one ash pit or fire: well, we thought it was a fire bed. However, it turned out to be an old burned stump and as yet we have no good ash beds and, unfortunately, no good C14 material. We are rather convinced that the occupation at this site was probably seasonal and probably in very small groups of people. The topsoil, which shows some scars from cultivation, is almost completely devoid of artifacts so apparently this was soil laid on during the 900 years after the site was deserted. We find no Late Caddoan materials. There are in the 1.5-2 ft. deep levels a few Coles Creek-like and Caddoan sherds but these are early Caddoan. From there down, this seems to be a pre-Caddoan site. A certain number of caches of stones were found fairly often at approximately the 3 ft. level indicating that these people were preparing food, usually these were pitted nut stones, a few hammerstones, etc.

Other than the Tchefuncte vessel there is one other complete vessel. It is plain, thick, crude. It has some gouge marks or use marks on the outside, and it is tempered with a combination of grog and bone. The Tchefuncte vessel excited our interest in the site and certainly it has podal supports; it has a satisfactory shape. Just don't be surprised that in East Texas they made Tchefuncte Stamped of better quality than they made on the coast. It may not be too unusual. However, I must say that in all the sherds that we have found since then, although we think some sherds would, in temper and paste, be consistent with the Tchefuncte period, we have not found any other sherds of Tchefuncte Stamped. Apart from this vessel—we found half a dozen additional sherds of this same vessel—no other sherds have been positively identified as Tchefuncte.

<u>Unidentified:</u> What is the size of the vessel?

Webb: It is 7-8 inches in height, and about 5 inches in diameter.

The stone artifacts are made almost exclusively of petrified wood or native tan chert; since these people had a limited source of materials which are not too good for making artifacts, most of them are comparatively crude. The favorite projectile point, about 85%, were Gary, and they ran from the average-sized Gary to small Gary, to the minute Gary, or what the people in Mexico have called Garyito, the little bitty Gary, which are no more than 3 cm in length. Many of these tiny Gary points are made much better as far as technique of manufacture than the others. About 66% of the Gary points are made on petrified wood; the others are native chert. A few other types include Ellis, Palmillas, probably Elam, and Kent. They are made rather crudely. They have fairly rectangular stem. Others include Desmuke, I think, Yarbrough, and one

possible small Paleoindian point with smoothed edges. The arrow points include Alba, Colbert, and Friley, with forward-turning barbs.

Most of the other stone tools are made of petrified wood. They had the side-bladed knife and a few hafted knives, still fairly thick. Then quite a number of the smaller knives, elongate, some ovoid; only one is double-pointed, and there are also triangular-shaped knives. There are also quite a number of what have been described as core bifacials, having the natural core at the basal end and the opposite end worked. There are three or four of what has been called Bristol bifaces. Then a fair number of uniface tools, end scrapers, side scrapers, curved side scrapers, and various oblong and different shapes.

Showing the use of local materials, hematite was used fairly often, including a circular disc and a celt, an unworked quartz object, two small pieces of galena, and two polished stone objects which looked as though they could have been the bowls of small pipes or else small cups of some kind.

The percentage distribution by the 6 inch levels show that the bottom two levels had comparatively few artifacts, as did the top two levels. Virtually the entire occupation is confined from 1 ft. deep to 3.5 ft. deep. Pottery sherds are found beginning at the bottom of the deposit; there is no pre-pottery occupation. However, the bottom three levels had a larger percentage of stone tools than are found in the top levels and dart points are pretty well consistently represented throughout the occupation.

Clay-tempered pottery sherds are present from the lowest levels, and there is not much change in the instance of clay-tempering throughout the life of this site. And on the bottom: 257 clay-tempered sherds, 296 bone-tempered sherds, and 173 sand-tempered sherds. These are the predominant tempering materials. However, a number of these sherds will have several different kinds of aplastics. They will have clay, bone, and sand, so that these people apparently did not mind every now and then what they scraped up to mix in with their pottery. As a matter of fact, additionally there are crushed pieces of hematite occurring fairly often; there are little pieces of gravel which will be 2-5 mm in diameter, so they just mixed whatever was readily available. However, this is an illustration of the fact that clay tempering, bone tempering, and sand tempering co-existed throughout the life of this site. There is good evidence here, though, that sand tempering progressively drops off from level 7 (3.5 ft.) as you come upward in the life of the site; and although this site has been badly disturbed by gopher burrowing and by a certain number of people artifact burrowing, still when you take the site as a whole there is at least a fair indication that the stratigraphy may be decently good. The arrow points increase in number towards the upper levels. The dart points drop off progressively. It is interesting to notice that the percentage on the various levels of stone tools, dart points, and sand-tempered sherds is almost identical.

I believe that gives you at least a brief summary of what is present at this site. The bone-tempered sherds are extremely interesting. We found some quite large sherds of bone-tempered vessels and the one whole vessel at about 2.5 ft. The Tchefuncte vessel occurred at 3 ft. depth, and there is another 1 ft. of occupation below the level at which the Tchefuncte vessel was found. The Marksville sherds occurred between 2-3 ft., so I think this at least gives some indication that this site represents the introduction of pottery on an Archaic lithic basis with no change in the lithics probably from what had existed before pottery times, and that clay-, bone-, and sand-tempered vessels were made throughout the life of the site, which we think probably started prior to Marksville times, and either contemporaneous with, or shortly prior to, Tchefuncte times. I would guess, therefore, the occupation of this site was probably from 400 B.C., or possibly 300 B.C., up to about A.D. 900. And even though it was lightly occupied, it gives, I think, some added information about pottery developments in East Texas. As far as the bases are concerned, we found no conoidal bases. Some of the vessels have rounded bases, but not conoidal. Most of the bases are flat.

<u>Unidentified</u>: Your Tchefuncte vessel would be at the same level where your arrow points begin. Is that right?

<u>Webb:</u> Between 2.5-3 ft., yes. There were projectiles in that level. I suspect that they were moved down. I do not think the stratigraphy there is tight enough. All over the field you find gopher burrowing. I do not think this is unusual in north Louisiana or East Texas. You find any good site and you find burrows where the gophers have been working.

<u>Unidentified:</u> Are most of your sand-tempered sherds thick?

<u>Webb:</u> Yes, as are most of the bone-tempered sherds. Some of the clay-tempered sherds are thinner but mostly towards the top levels.

<u>Unidentified:</u> You can't reconstruct the decoration on the sand-tempered vessels too well?

<u>Webb:</u> Not yet. There are, I believe, two decorated sherds in the sand tempered, one with horizontal incised lines, another with horizontal lines and then curved lines below it. It is a fair rim sherd. Rim notching is not at all unusual. Several of the sand-tempered sherds had notched rims and perfectly plain bodies.

<u>Williams or James B. Griffin:</u> If that vessel is as unique as it seems to be, both in the quality of decoration and the quality of the finish, and the decoration technique is unique, then even if it is a Tchefuncte vessel, it should never be called Tchefuncte Stamped because that brings to mind the particular style of decoration, quality of paste, and so on, so that I think that you have got to be a father and name this.

Webb: Oh, I do not think you can name it on the basis of one vessel.

Williams: It is certainly not Tchefuncte Stamped as it is known in the literature.

Webb: Certain?

Williams: It certainly is not. If you said Tchefuncte with a small "s" stamped, then this could be all right.

Webb: A stamped vessel of the time period which would equate with Tchefuncte.

<u>Unidentified:</u> This would be my idea—because when you say Tchefuncte Stamped to me, I would never have thought of that vessel you have.

<u>Webb:</u> Some of the sherds which Joe Ben Wheat illustrated are not too far different from this, and that is from the Addicks Reservoir in Southeast Texas, just out of Houston.¹⁹ However, the lines are vertical instead of horizontal.

Williams: The paste sounds more like Tchefuncte. The color is different.

<u>Ed Jelks:</u> I believe we had a few Tchefuncte Stamped sherds from some of the sites at McGee Bend also. They were, you know, loosely typed; they are very few.

<u>Webb:</u> I suspect maybe we will quit calling Tchefuncte-like sherds found at Poverty Point "Tchefuncte" also. There are some differences, I believe, in paste and method of decoration. Again, the time period is early, but maybe a little different from what has been described on the coast.

Williams: We have good Tchefuncte Incised at the Panther Lake site, not 4-5 miles from Poverty Point.

<u>Webb:</u> Is there anywhere else that this kind of polypodal base and arrangement of decoration, which at least looks like Tchefuncte, occurs any later than the Tchefuncte period? So that in matter of comparison of time period with which we could equate the other pottery types found at this site and through East Texas, it would still hold valid. Would any of you folks from East Texas object to the suggestion that this pottery ensemble could easily have started 400-500 B.C.?

The Tchefuncte sherds in Wheat's site near Houston also occurred about 1-1.5 ft. above the bottom level of pottery. It was mostly sand-tempered pottery preceding the occupation level at which Tchefuncte was found there.

¹⁹Joe Ben Wheat (1953) *An Archeological Survey of the Addicks Dam Basin, Southeast Texas*. River Basin Surveys Papers 4, Bulletin 154. Bureau of American Ethnology, Smithsonian Institution, Washington, D.C.

Jelks: The evidence is clear, I think, that the sand-tempered pottery is certainly the earliest found down on the coast, inland as far as we have been and other surveys have been. It looks to me like what we found down there. This is the same that Joe Wheat had at Addicks. And these come characteristically with the conoidal or convex bases, and there are deep scars, often lip notched, and this form of vessel survives on the coast through the historic period. In later times, clay-tempered pottery becomes more common, but the basic shape with the conoidal base hangs on and then you can see a Coles Creek type decoration appearing on the rims of those things later. I say later: the chronology on this is not real good. And then on down the coast you get the asphaltum decoration on the vessel, on down the coast past Rockport, and it runs inland for 150 or 200 miles, and I have no idea how far it goes east, where you have this characteristic sand-tempered pottery with the conoidal base, the earliest form of which is plain sand-tempered, occasionally lip notched. It must have been pretty early because it is hard to see how that pottery could have come into that area unless it came early. Otherwise, it pushes to a late date Tchefuncte and all that stuff in between and you would have to leap over several cultures.

<u>Unidentified:</u> Isn't sand tempering a Tchefuncte type?

<u>Webb:</u> Yes, I checked that. It's about 13% in the original Tchefuncte report²⁰ from the several recorded sites. Four or five pottery types were predominantly sand-tempered. Some of it looked like Alexander, the materials brought in, but some of it seemed to be of local manufacture. Lake Borgne Incised, I believe, is often sand-tempered.

<u>Unidentified:</u> Some of it is represented in that early, early phase of brushing.

Webb: Chinchuba Brushed? That's right.

<u>Unidentified:</u> What about this conoidal base pot? Could that be Woodland? Have you ever seen anything like that in East Texas?

<u>Unidentified:</u> There is sand-tempered with conoidal bases in the Pickwick Reservoir.

<u>Jelks:</u> I cannot help but wonder if maybe it is an early form that runs way on across the Gulf Coast.

<u>Webb:</u> Was it in the Wheeler series? Sand-tempered? The conoidal form?

<u>Jelks:</u> You never find a complete pot. These are hard to find. You pick up the little sherds and after you get an awfully good sample of several thousand sherds at a site you would hardly recognize the form.

<u>Charles Bollich:</u> I'm an amateur, so I can speak up. Isn't it possible that maybe even we will end up with a pre-Tchefuncte pottery that was here a long time ago? You find the artifacts like these in Tchefuncte sites I think around 1000 B.C. and so on. You will find in pre-pottery times bone projectile points, use of asphalt, but maybe this sand tempering actually preceded that.

Webb: I think so.

<u>Jelks:</u> There is no question that they preceded all the clay-tempered series in southeastern Texas. Your sand-tempered pottery on down the coast puts it early. Whether it is the same conoidal base form doesn't seem too clear.

<u>Unidentified:</u> Sand tempering is not that early?

<u>Unidentified:</u> It has never been reported this early?

<u>Unidentified:</u> Not by radiocarbon dates.

²⁰See Ford and Quimby (1945) in References Cited.

Webb: I think this site will give pretty good evidence, unless things change between now and the time we finish, that not only sand tempering but clay and bone tempering were present in East Texas before or by Tchefuncte times, because the evidence so far is pretty good because 3-4.5 ft levels had very little disturbance. None of the potholes that had been dug on this site got that far down and deeper levels are relatively undisturbed. Also, all the gopher activity is largely in the upper 2 ft. of the site, and yet in the earliest levels at the site there is just about as much clay and bone tempering. The two sherds found at the lowest level, which was 4.5 ft.: one was bone-tempered, the other was sand tempered. The next level had bone, sand, and clay.

There are a couple of questions I wanted to ask the folks down Houston way. First, is the early pottery near the coast predominantly plain pottery?

<u>Unidentified:</u> All of the pottery is predominantly plain. Out of 1500 sherds from Wallisville, all were plain in the early period beginning at A.D. 150. Decoration only came in at A.D. 500.

<u>Bollich:</u> It is worth mentioning that there is also a Marksville intrusion on the lower Sabine and it also gets into the Galveston Bay area, which may tie in with some of the mounds that have been described on the Sabine.

<u>Gregory:</u> In that same context, there's almost a complete dearth of Marksville sites, good single component Marksville sites, in the hill country between here and the alluvial valley to the east of us, really, until you get to the Marksville site area, the lower mouth of Red River itself. The Fredericks site²¹ seems to have a lot of stamped ware, but it is probably Manny Stamped, which may throw it into Troyville. The projectile points and other things there look remarkably Troyvillian—Coles Creek pottery, Catahoula and Alba points—so there does not seem to be any connection from this direction through the drainage out into the east.

<u>Bollich:</u> We did a survey along the eastern Texas coast the summer of 1965, and we came to a sharp break just along the Louisiana-Texas line with the exception of this Marksville intrusion in the Galveston Bay area, and there are only a few Crooks Stamped and Marksville Incised sherds. But it did get over at least as far west as Galveston Bay and everything else is a different breed of pottery.

Williams: Is there any Crooks Stamped at Coral Snake?

Sherman Gagliano: No.

Williams: Because it seems to be going up the river. It has a very limited distribution.

Webb: Up the Mississippi?

Williams: Yes, up the Mississippi.

<u>Webb:</u> It does not come up the Red to amount to anything. I do not think there are any Crooks Stamped sherds at the Fredericks site. It is the best Marksville site in north Louisiana.

<u>Williams:</u> We have good Marksville Stamped in the upper Tensas where we also have Issaquena. The Marksville pottery has cross-hatched rims and we do not get it with Issaquena.

<u>Webb:</u> You're suggesting that possibly the Marksville spread into Texas and up the Red River occurred in the latter part of the Marksville period?

<u>Williams:</u> Not around Galveston Bay. I think all the evidence is that these people are making a series of pushes and at different times.

<u>Unidentified:</u> I am not sure we ever had any Marksville people in the Galveston Bay area. We have the pottery, but there is not much of it, and not enough to say we had a push of people coming from over there.

²¹For a recent reference to the Fredericks site, see Jeffrey S. Girard (2000) Excavations at the Fredericks Site, Natchitoches Parish, Louisiana. *Louisiana Archaeology* 24:1-106.

<u>Gagliano</u>: I do not think that is true on the coast of Louisiana because we certainly get the whole Marksville burial complex, the small conical mounds with burials, apparently; these little bladelets; even copper artifacts. It is as far west as Pecan Island, too, and most likely at the mouth of the Sabine as well. We have the whole complex, and not just the pottery.

<u>Griffin:</u> These people were migrants, on the evidence throughout the whole Southeast of, say, unit intrusions by small groups in sequence.

Bollich: It looks to me that where the environment cuts off going further down the coast is around Galveston Bay, but essentially south of Beaumont up to Galveston bay you have essentially the same conditions as you do on the Louisiana coast, and I think all we are talking about is the margin to which this extended. I think the Neches is more of a cultural dividing line than the Sabine River. There is a lot more clay-tempered pottery east of the Neches than west of it. When one gets south of Galveston Bay, there are more sand dunes and such, like on the King Ranch, so maybe that is the natural division there. They were in the same environment up to Galveston Bay, so I do not see why they would not have spread from Louisiana a little farther. You will find primarily the sand-tempered pottery.

<u>Gagliano</u>: This strip of coast between the Sabine River and Galveston Bay is a very poor area even from the standpoint of aborigines, and it would have been a dismal place to live, I think. With the exception of the estuaries along the Texas coast, this is certainly true for the whole coastal strip. It gets increasingly dry and sandy, and poorer as one moves west.

<u>Gregory:</u> If hunting and gathering is crucial, why did they not move up the Red River valley? They start out at the Marksville site, which is, after all, very close to the Red River, and it is classic, and if these cultural people are Marksvillian, purely so, and they are adaptive to the environment as hunting and gathering would indicate.

<u>Gagliano</u>: We have been thinking in terms of some agriculture. Groups could practice agriculture on a small scale effectively as far west as the Sabine in the coastal area, but west of that it would be pretty difficult to raise anything except watermelons and cucurbits.

Webb: I think we have something else in northwestern Louisiana, though, on the Marksville time level because the Bellevue focus is contemporaneous, and we now know of about eight sites. The small mounds are around 50-60 ft. in diameter and 3-4 ft. high, predominantly with plain pottery which is tempered with clay and about 3-5% bone tempering. There are stone beads. One of the sites has very good copper beads. There are flexed burials, three sites with cremated burials, and two of the mounds have the small, about 2 ft. high, primary platforms capped with clay, underneath which there are burials, either flexed or cremated, and then a cap on top, much like those small mounds over in Mississippi. And at these sites there are 6-8 sherds of either Marksville or Manny Stamped—I cannot tell the difference because there are no rims—but mostly plain vessels. The sherds are so small and so infrequent that we have very little idea of vessel shape. Apparently the bases are flat; the lithics are the characteristic carry-over from the Archaic: Gary and Ellis, the same range of lithics as at the Resch site.

So, there is this occupation across northwestern Louisiana. I do not think it has been identified in East Texas, but the Jonas Short and Coral Snake mounds are not greatly different from it. Although the same kind of Marksville that occurs at the Red-Mississippi junction does not come on up with large masses of pottery and at least a certain amount of well-decorated pottery, there is something on that time level.

<u>Gregory:</u> These sites very similar to Bellevue seem to occur down at least this far south, which is interesting when you think about the Fredericks site being the only thing we might want to call Marksville in this part of the state. Jon Gibson located one of these little mound groups here with some beads and large projectile points. Was there any pottery there?

²²Clarence H. Webb (1984) The Bellevue Focus: A Marksville-Troyville Manifestation in Northwestern Louisiana. *Louisiana Archaeology* 9:251-274.

Ion Gibson: No.

<u>Gregory:</u> No pottery at all. The site is gone, land leveled. When the mound was graded, there were cremations with a lot of ash and bone and stone beads in the burials, clay-capped sort of sub-structures, small mounds.

Webb: Mike, I gathered from your discussion this morning that in southern or southwestern Arkansas apparently the earliest kind of pottery you find is sand tempered?

<u>Hoffman:</u> Sand-tempered with flat bases like the bases on Williams Plain, and there is no stamped pottery. There are small burial mounds.

<u>Webb:</u> Is all the pottery at this site sand-tempered in the deeper levels? Or is there some clay-tempered?

Hoffman: We have more of the sandy paste and included at these sites is bone-tempering and clay-tempering also. A primary characteristic of the paste is it is like sandpaper. I was thinking about the Ouachita River. It appears Marksville people moved up it.

Webb: There may have been some people already along the Red that did not welcome them.

Hoffman: But we do not have any conoidal bases on our sand-tempered pottery that I know about. In one fairly tight context last year there was a very small sherd which I thought was similar to Tchefuncte in size and temper. At the Hutt site, there are sherds with horizontal line incisions that appear to be Coles Creek styles. I do not have any further hints as to placement of the sand-tempered pottery except that it is earlier than the Caddoan generally, although some may have continued on later, also.

Webb: Does sand-tempering cross the Red River and go on to eastern Oklahoma?

Hoffman: In the Fourche Maline focus there is always a minority of pottery that is sand-tempered. From looking at site reports, it is not high. At the Denham site that Ray Wood excavated on the Ouachita River,²³ there is also about 20-30% in the early component which is sand-tempered. We included it in the Williams Plain there, calling it a component of the Fourche Maline.

Second Session, continued, Ed Jelks, Presiding

Ed Jelks: I want to describe a project that the University of Oklahoma, the University of Texas, the Museum of the Great Plains, and SMU have in progress at the present time. We are working on historic Wichita Indian sites.²⁴ This is supported by the National Science Foundation, and it involves reconnaissance to locate sites on the Red River in Oklahoma and down into Texas on the Brazos and Trinity rivers. We know of a number of these sites which collectively are sometimes referred to as the Norteno focus. Our major effort up to the present time has been excavating the Spanish Fort site. It consists of large twin villages on opposite sides of Red River, the Texas site being in Montague County near Nocona, and the Oklahoma opposite and a couple of miles down the river.

The site of Spanish Fort is not in the Caddoan area proper, I would think, but it does relate to archeological sites on down Red River. At the Sanders site—near the Sanders mound, about 500 ft. away there is a historic occupation that was not noted in the original Sanders report by Krieger. There are a few glass beads, just a tiny indication of contact with Europeans, and there is a very rich native culture of ceramics, stone work, arrow points, flint traces, etc. Farther down the river a way below the Sanders site is the Womack

²³W. Ray Wood (1963) The Denham Mound: A Mid-Ouachita Focus Temple Mound in Hot Springs County, Arkansas. Anthropology Series No. 1. University of Arkansas Museum, Fayetteville.

²⁴Robert E. Bell. Edward B. Jelks, and William W. Newcomb (assemblers) (1967) A Pilot Study of Wichita Indian Archeology and Ethnohistory. Final report for Grant GS-964. National Science Foundation, Washington, D.C.

site, or Garrett's Bluff, which probably dates to the late 17th or early 18th century. There is more European trade material there, but the field yields a rich inventory of native material.²⁵ Then, where Whitney Reservoir is now on the Brazos, the Stansbury site was excavated in 1950. It had one house, and two occupations, one the late 18th century and one about 1830 or 1840.²⁶ The Gilbert site on the upper Sabine River was excavated by a summer field school of the Texas Archeological Society (TAS) in 1962. It appeared to date from the mid-18th century.²⁷ There is also the Vinson site, which is in Limestone County, which was excavated a few years after the Gilbert site by the TAS.²⁸ There was an oval-shaped house there and a couple of small circular houses also. This site is an 18th century occupation, and it perhaps survived into the early 19th century. There are a number of other such sites of these Wichita-affiliated tribes from central Texas on eastward into the Trinity and Sabine Rivers.

Gregory: Can I waste five minutes here? Out west of Natchitoches at Robeline there is a site, a Spanish contact site, called Los Adaes, a mission and presidio.²⁹ It was well established about 1720. The Adai tribe seemed to stay there until about 1805. There has been no excavation. We have been surface collecting here with students off and on for about three years. The parish government here has been very nice about cutting ditches across this park for drainage, and they give you a good cross-section of many houses and cache pits. One house showed as a low mound about 2 ft. high above the floor level. The house fill is a very dark midden. As far as I know this is the only historic Caddoan site where there have been any house patterns at all, at least down in Louisiana. The cache pits are straight-sided and about 4.5 ft. deep and 3 ft. wide. eroding out have been lots of beads and pig (?) bones.

Third Session, Ed Jelks, Presiding, February 5, 1966

<u>Jelks</u>: I am glad to see so many in attendance this morning.

There is one question that Steve Williams and I have talked over several years ago: the location of the Kichai site and whether the Kichai had adopted Caddoan pottery or whether they still made plain-type ceramics like the Wichita. King Harris has better evidence of the location of some of the Kichai sites.

<u>R. King Harris:</u> I think we do. I think the Womack site is Kichai. We do have Natchitoches Engraved at the site as trade ware. But I think a lot of the Womack Engraved patterns are probably derived from Natchitoches Engraved or some of the material down river.

Webb: You think Womack Engraved is a resident type?

Harris: Yes, it is a resident type up there at the Womack site.

Webb: Anything more to identify Womack Engraved as Kichai other than its specific location on the map?

Harris: Well...nothing as specific as the figurines found at Spanish Fort.

<u>Jelks:</u> We are trying to zero in on the Kichai site on the Trinity River, and this is one of our main things we are checking out. Maybe next year we can get something worth some time at the conference.

²⁵R. King Harris, Inus Marie Harris, Jay C. Blaine, and Jerrylee Blaine (1965) A Preliminary Archeological and Documentary Study of the Womack Site, Lamar County, Texas. *Bulletin of the Texas Archeological Society* 36:287-365.

²⁶Robert L. Stephenson (1970) Archeological Investigations in the Whitney Reservoir Area, Central Texas. *Bulletin of the Texas Archeological Society* 41:37-277.

²⁷Edward B. Jelks (editor) The Gilbert Site: A Norteno Focus Site in Northeastern Texas. *Bulletin of the Texas Archeological Society* 37:1-248.

²⁸James E. Smith II (1993) The Vinson Site (41LT1): A Norteno Focus Indian Village in Limestone County, Texas. *Bulletin of the Texas Archeological Society* 64:65-162.

²⁹Hiram F. Gregory (1973) Eighteenth Century Caddoan Archaeology: A Study in Models and Interpretation. Ph.D. dissertation, Department of Anthropology, Southern Methodist University, Dallas.

<u>Webb:</u> We have always been intrigued with the town near Mansfield, Louisiana, named Keatchi, whether it derived its name from a nearby Kichai village. If so, we have never found that village.

Unidentified: Where is that town?

Webb: It is in DeSoto Parish, not very far north of Natchitoches, only 4-5 miles from the Texas line.

Unidentified: Is there a Keatchi Creek there?

Webb: Yes. It flows eastward through Wallace Lake into Red River.

<u>Harris</u>: I have one other little item that might be of interest. On the Sulphur River there are two historic Caddo burials, one of which has a Natchitoches Engraved vessel with red pigment in the lines.³⁰ But it is a bright red so I thought about the possibility of having this red analyzed and the pigment in the decoration of this vessel is vermillion.

<u>Gregory:</u> There are a few sherds from Los Adaes even in the surface collections that have the same pigment in them. I am suspicious that it was not hematite, but was vermillion. They are too red and soft—greasy feeling—this may well be vermillion.

<u>Jelks:</u> Now we will hear something about trade gun typology from Jay Blaine.³¹

Blaine: Those of you who have had occasion to deal with historic material have probably taken gun parts to gun experts and asked, what is this? What nationality might it be and how old might it be? And if your experience is the same as mine, you encountered some very fancy footwork, particularly if you were dealing with 18th century material. There seems to be a relatively clear picture after 1800. This is based on recognition of English standard Northwest trade gun types. The area, of course, that we have been dealing with in Texas appears to be influenced primarily by the French trade; in the most part, the material I have worked with has been 18th century in age, and I find that the experts on the 19th century English trade guns are as vague on the 18th century English guns as they are on the 18th century French material. The question was where to find a basis of comparison.

In studying sites, and materials from sites, the 1730 cut-off date for the Angola site and extending to Gilbert and Spanish Fort, we were able to make up groups of gun parts that showed stylistic similarities, and once we had grouped these things and examined what was high French fashion in the period, there was a definite comparison that could be made with what was arriving on the sites in the form of trade materials. This, by the way, makes a startling contrast with 19th century British trade. They had developed a stylized Northwest gun by this time that was produced essentially for aboriginal trade, be it African or Indian, and it in no way reflected current English fashion. The problem then became one of identifying French fashion through time. We were fortunate in these later years in having access to French master gunsmith designs. These are plates of engravings made up primarily by making direct pulls from the engraved work and the decorative work done by the gun decorators in France made up into pattern books for the use of those in the trade.

There are two major periods represented at present: 1705-1750 and 1750-1800. We have been able to make direct comparisons on the basis of decoration, form, and size. We do not know what sort of time lag may be represented between what was high French fashion as far as the domestic French market was concerned and what would filter down to the Sears and Roebuck class of shotgun that might be furnished a Frenchman who wanted to hunt a rabbit. The guns that are preserved in museums, unfortunately, are high art craft, fine works of art. Most of them are too precious to even be used, but they still do exhibit these style manifestations that can be traced to French trade.

³⁰R. King Harris, Inus Marie Harris, and Pete Miroir (1980) The Atlanta State Park Site in Northeastern Texas. *Louisiana Archaeology* 6:231-239.

³¹See Jay C. Blaine and R. King Harris (1967) Guns. *Bulletin of the Texas Archeological Society* 37:33-86.

One of the most useful parts of the gun that I have dealt with so far is the trigger guard. This is a little loop fastened to the bottom of the gunstock that protects the trigger to prevent accidentally firing the gun. All of the French pattern books made reference to (as Ed Jelks noted) a Chevrolet-like item³²; it is essentially a step design. We have this basic simple design on the 1730 Angola trigger guard and on one specimen from Gilbert which would probably date 20-30 years later. But it begins to become complicated, beginning to fill it in with other elements. This Chevrolet element seems to hold in the period before 1732. By the time of Gilbert they begin to become more complex or rococo. An asymmetric design element begins to develop, and we have that reflected at Gilbert on two of the trigger guards. So, we now have a way of telling what is French and telling about what time it would have been most popular. From the period from 1750-1800, I have not been able to identify any style changes.

You notice that I have not said what goes with the trigger guard. These guns are torn apart continually. They are broken down into little bits, and the little bits are modified into points and tools of other sorts, like scrapers. We have not had the good fortune of finding any grave associations with the gun material with the exception of the Angola material. But as we make these groupings, we can make a quantitative analysis and we have a fairly good idea now of what hardware goes with what. It will take a good deal more study and time to work this out, but basically I can tell you that we can recognize some 18^{th} century English and 18^{th} century French trade guns. As time goes on, this material continues to come in for examination.

<u>Jelks:</u> You mentioned the trigger guards as being particularly good for dating. What about other parts of the gun? Could you tell us what is good and what is not?

Blaine: Apparently the best thing we have come up with in reference to the French trade is decoration. The flat solid brass side plate (mounted on the other side of the gun stock from the gun lock) was not used by the English until after 1750 on common grade guns, but we find it in use by the French from 1705 on. In the common grade gun they produced a design in the form of engraving on this flat surface. In the fine grade, at the same time, they were chiseling in relief and molding in relief in fine and precious metals. We find the same design elements rendered in a cruder form in what we are getting on the trade sites. If you find a flat side plate of this nature and you have reason to believe that your site dates before 1750, right now it is pretty safe in assuming it to be French trade. I found no cross correlation with English guns. The only thing that the English used at this period was a stylized sea serpent or dragon-type faces. In the 18th century, or before 1775, this is rendered in flat plate with the design produced in the engraving. After 1775, this dragon side plate of the English begins to be cast, with the details of the scales produced in the casting.

Side plates have been useful this way. Unfortunately, for our purposes, side plates are really nice to cut off and sharpen along the edges and use for some tool or other, and it makes a nice pendant because it already has a hole at one end.

<u>Unidentified:</u> You can identify without too close inspection French plates, guards, gun part, etc., yet we see definite English gun flints.

<u>Blaine</u>: We can identify French gun flints both in the early form and the late standard form. The characteristic French gun flint is produced in plan view in a V-shape form. We have major facets across it, and on the opposite side a planar surface and then they trimmed out the edges by much fine flaking and secondary retouch, and characteristically it is of a honey-blond flint, sometimes clearer than other times. These have been thought to occur after 1750, but we now know that they go back as far as 1675. At the same time, produced from a lesser grade of material, you have a French gun spall. Hamilton³³ identified these as singularly detached flint spalls produced by impacting a flint nodule to get a flake off, then you trim it, and you have a gun spall. King

³²see Blaine and Harris (1967):80.

³³T. M. Hamilton (1960) Indian Trade Guns. *Missouri Archaeologist* 22, and T. M. Hamilton (1964) Recent Developments in the Use of Gunflints for Dating and Identification. In *Diving into the Past*, edited by June D. Holmquist and A. H. Wheeler, pp. 52-57. The Minnesota Historical Society and Council on Underwater Archaeology, St. Paul, Minnesota.

Harris and I discovered that it is not possible to produce a great number of these spalls that we find in the manner that Hamilton described. They have to be produced on a prepared core because the flat planar surface is produced by a wide, shallow flake which travels all the way across, and we have specimens with no lateral retouching on one side, yet on the opposite side there is evidence of roller percussion.

The French had a corner on the market up until 1800. They had a virtual monopoly on it until 1750. I do not know all the reasons for this, but they were exporting gun flints to their enemies as well as their friends. The English army was supplied with French gun flints during all of the wars they fought with the French in the 18th century. After 1800 the picture changed. The English gun flints begin to dominate, particularly the black and grayish flints from Brandon. Before 1800, then, French flints; the fact that you find a French gun flint in no way indicates that it is French trade. It may be, but you simply cannot say that it does. After 1800, there are some French gun flints but they are certainly in the minority; I would say by 1820 it would be a rare thing for a French gun flint to show up on an Indian site.

We have recovered no evidence whatsoever in any of the sites that I have dealt with of the rifle. All we dealt with are light smoothbores. We find a trace only of Spanish weapons. It is all French, or English, in Texas at least.

<u>Unidentified:</u> What did the butt plate on French muskets look like comparatively?

<u>Blaine</u>: On a typical Spanish-form musket the bottom of the butt plate should be square, if it is a full-stock weapon, because in that period the Spanish stocks were squared off on the bottom.

I sure would like to get into a big stock of Spanish trade material; it would be very useful. The Spanish had the policy of no weapons to the Indians. What we recover from them is the result of military disasters. In later times, when they did do some trading in the 1800s, they used, unfortunately, surplus English muskets for that purpose. If the Spanish ever manufactured a typical trade form for North America, I do not know of it. They did for Europe and for Africa, but I have seen no signs of it so far in our collection.

Fourth Session, Clarence Webb, Presiding

Webb: Before presenting the next speaker, I wish to report a satisfactory resolution of the argument during the first session concerning the Tchefuncte vessel from the Resch site in Harrison County, East Texas. We had included this vessel in the Tchefuncte Stamped type and this was challenged because the decoration was produced by a triangular stamp with no evidence of rocker stamping. We have checked this in the original description of Tchefuncte ceramic types in Ford and Quimby (1945). Decoration of this linear triangular stamped variety is included in the present description of Tchefuncte Stamped. There are three sherds out of about eight or 10 in the original description of Tchefuncte Stamped which are made by the same technique as this vessel is made. We argued, however, that there is good reason to separate out this, now, as probably a sub-type because it is made with a technique apparently different from the usual rocker stamping that Tchefuncte was made with. The consensus means that we have arrived at a good compromise. That a fair statement, Steve?

Williams: Yes.

<u>Unidentified:</u> Do you have projections for this type-variety, the name you think you might begin to use?

Webb: Resch.34

<u>Unidentified:</u> Can you constitute a type-variety on the basis of one piece?

<u>Webb:</u> One vessel, one additional sherd, and three or four sherds illustrated in the original report on Lake Pontchartrain.

³⁴See Webb et al. (1969):33 and Figure 9, Tchefuncte Stamped, var. Resch.

Webb: There is one question I would like to bring up, not to revive an old argument which we just about resolved a year ago, but at least to keep us from getting rigid in our thinking. That's the matter of the movement into the Caddoan area overland from somewhere spilling out of northern Mexico and the question of whether this came en masse or whether it came comfortably by stages. If this occurred, the part of the Caddoan area which this move would have been into would have been the southwestern portion of the Caddoan area: East Texas. I think we should not close our minds to the possibility that any of this movement at all could have occurred prior to the now agreed date of approximately A.D. 850; and our agreement that generally—in all the mounds so far excavated in which both Coles Creek and early Caddoan occur—the Coles Creek came first and then the Caddoan. I think we should not close our minds to the possibility of something that Burney McClurkan brought up yesterday, that there may be Caddoan elements in East Texas prior to this time and before the fully developed Caddoan culture, with all the traits that we talk about, came in. I would not be too greatly bothered to discover at least some Caddoan elements in that part of East Texas at A.D. 500 or 600.

Not in defense of Krieger, but thinking that it had to come in, if it spilled over from northern Mexico, it might have spilled by degrees at first and then spilled all in one flood. As we discussed last year, the Coles Creek people spreading over the Caddoan area had established a good agricultural base and a good community base on which could be engrafted this body of Caddoan ideas that came in out of Mexico. But that certain elements could have come in earlier than A.D. 850 is entirely conceivable, and I would not like us to close our minds to this possibility until we have more information.

<u>Unidentified:</u> Spiro is a later cultural expansion.

<u>Webb:</u> It is about the farthest away from Mexico than anything in the Caddoan area is and I cannot conceive, unless these people did not travel overland, that they jumped all the way up the Mississippi and Arkansas and then sat down suddenly in Oklahoma. I cannot conceive that Spiro should have the roots, the beginnings, of what we call Caddoan. I would look for it somewhere down in East Texas, or maybe in north central Louisiana.

<u>Unidentified:</u> The Mexican elements that occur at Spiro are really independent of this sequence you are talking about here. I mean it is the time of regional interaction throughout the Southeast in which Mississippian culture evidence, presumably, in part derived from Mexico. This is a time period which is outside of questions of Caddoan origins. Moreover, it is a group of elements of the culture which are quite independent of ceramics.

<u>Ford:</u> I think you should just keep in mind the chronology and also the different ways in which people will receive introduced elements where there already exists a good thriving Neolithic culture. They are going to modify and select. Whereas, around 2000-1500 B.C., they are moving out among backward Archaic peoples. They are not prepared to make selections.

Intermission

Webb: All of us have been interested in the past year or two about the relationship of Caddoan to some of the immediately or shortly preceding cultural periods, and especially pottery comparisons, so we thought it might be desirable to ask Dr. Stephen Williams to talk about some of the work that he has done in northeastern Louisiana to give a better definition to some of the cultural periods, especially Troyville and Coles Creek. And then we can go to general discussions and questions and answers in a friendly round table.

<u>Williams:</u> The areas that I am concerned with are two basic ones: the lower Yazoo Basin—roughly the area bounded on the east by the Mississippi bluffs and the Mississippi River (Figure 1)—and the upper Tensas basin (Figure 2) in northeast Louisiana, bounded on the west by Macon Ridge, running down to around Natchez and Sicily Island.

Webb: It is the western flood valley of the Mississippi?

³⁵See Burney B. McClurkan, Edward B. Jelks, and Harald P. Jensen (1980) Jonas Short and Coral Snake Mounds: A Comparison. *Louisiana Archaeology* 6:173-206, especially pp. 192-195.

TIME	Phases in Lower Yazoo Basin	The Cultures	Pottery - Stone	Phases in Up. Tensas Basin
1700-	RUSSELL	HISTORIC TRIBES	Fatherland Inc. and Barton (Unclass.)	TAENSA ON LAKE ST. JOSEPH
1600 — 1500 —	LAKE GEORGE	MISSISSIPPIAN	Winterville Inc., Leland, and Grace Brushed.	TRANSYLVANIA
1400- 1300-	MAYERSVILLE	DI AQUEAUNE	Plaquemine Brushed and Tunica Rims.	FITZHUGH COMPLEXES
1200-	CRIPPEN POINT	PLAQUEMINE	Hardy Inc.	EARLY PLAQUEMINE
1000- 900-	KING'S CROSSING	COLES CREEK	Vicksburg Rims, Mott, Greenhouse. C.C.I var. Coles Creek	BALMORAL
800 - 700-	ADEN	COLLS CALLA	and French Fork var. Larkin.	BALLINA
600-	BAYLAND	BAYTOWN/	C.C.I. var. Sundown & Mulberry C.C.M.var. Smith Creek.	SUNDOWN
500 - 400 -	DEASONVILLE	DEASONVILLE,	Woodville and Salomon Brushed var. Delhi.	MARSDEN INDIAN BAYOU
300-	ISSAQUENA II		Old River Stamped. Yokena Inc. and	INDIAN BAYOU ISSAQUENA
200 - A.D. 100 -	ISSAQUENA I	MARKSVILLE	Manny Stamped Bruton Textured Cross-Hatched Rims Mabin Stamped	JOHNSON É HEAD COMPONENTS
0 - B.C. 200 -	ANDERSON LDG.	,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,,		POINT LAKE
400-	TCHULA	TCHEFUNCTE	Tchefuncte Stamped £ Lake Borgne Inc.	PANTHER LAKE
600- 800-	Fiber Tempered Wares		A	Fiber Tempered at P.P.
1000- 1200- 1400- 1600- 1800-	JAKETOWN	POVERTY POINT		POVERTY POINT
7000-		ARCHAIC		?
10,000		PALEO-INDIAN		DALTON POINTS FLUTED-POINT AT THE MOTE SITE ON MACON RIDGE. FIGURE 1.

SEQUENCE, of PHASES	BUILDING the TENSAS SEQUENCE	CULTURE
HISTORIC TAENSA	LAKE ST. JOSEPH. Beasley (24-L-14), New Ground (24-L-12), Clark Bayou (24-L-9). LOCALITY No Trade Goods so far.	HISTORIC TRIBES
TRANSYLVANIA	TYPE SITE. Late Levels - Shell-Tempered Complex. Sites: Weld (22-K-14), (22-L-3)* Canebrake (24-3-9)*. Some Natchezan connections.	MISSISSIN /
FITZHUGH	TYPE SITE. Major Mound Construction. Sites: Folk (23-L-12), $(23-L-1)^*$. Somerset (24-L-2), Elk Ridge (24-L-13).	PLAQUEMINE
EARLY PLAQUEMINE" LITTLE KNOWN	Little known at present: Possibly lower levels at Fitzhugh (23-L-1)*	
BALMORAL	TYPE SITE . Mott (23-J-1)*, canebrake (24-J-9)*, Hilly Grove (24-L-7)* (24-L-1)* . Many sites known.	
BALLINA	TYPE SITE. Compton Lake (23-L-9)*, Insley (23-K-2)*. (26-J-8)* Best evidence to the south.	CREEK
SUNDOWN	TYPE SITE . cooter Point (25-K-II), Johnson (22-K-6)*, Compton (25-K-9)* . Lake (25-L-9)*.	→ `
MARSDEN	TYPE SITE . Neeley(22-K-10)*-Pure fire pit complexes. (23-K-4)* . Stickley (22-K-17), McNeal (22-K-8).	SONVILLE
INDIAN BAYOU	TYPE SITE . Mound D at Type Site. Insley (23-K-2)*. (23-K-3)* . Few sites known, mainly in the south.	DEMTRUS! A
ISSAQUENA	Lowest levels at Indian Bayou $(23-K-3)^*$ and Mott $(23-J-1)^*$. Many surface collections. Enigmatic Components: Head $(21-K-1)^*$ and Johnson $(22-K-6)^*$.	MAPKSVILLE
POINT LAKE	TYPE SITE . Some Mabin Stamped sherds as strays at (23-L-16)* . Canebrake (24-J-9)*, etc. Very rare.	—
PANTHER LAKE	TYPE SITE . Some Tchefunctoid sherds at Poverty Point (22-K-1)* (22-K-20)* Only abundant evidence at Type Site.	TCHEFUNCTE
POVERTY POINT TYPE SITE (22-K-1)*	TYPE SITE . Other components: Head (21-K-1)*, Mott (23-J-1)*, (22-K-1)* Insley (23-K-2)*, Panther Lake (22-K-20)*, Neeley (22-K-10)*.	POVERTY POINT

Williams: Yes. Other major areas that we will have to consider in the inspection of the prehistory of this area are around the Red River mouth where Jim Ford did his pioneering work years ago in the Marksville locality, and then the area in between where the type site of Troyville is. The area on the other side of the river is less well known, although it includes such famous sites that gave type names to things like Yokena Incised. It has not been adequately covered since the very cursory work in the 1930s by the LSU survey.

We tried to set up cultural sequences in both these regions. The lower Yazoo is a combination of research initiated by Philip Phillips following the report by Phillips, Ford, and Griffin (1951).³⁶ The sequence is based on surface collections and excavations at a series of major sites, including Manny, Thornton, and Mabin. Starting out at the earlier part of the sequence following the Anderson Landing phase (our component of classic Marksville) was that of the Issaquena phase, the sequence from Bayland, or this Deasonville phase around A.D. 500-600, through Lake George is based on my excavations between 1958 and 1960 at the Lake George site in Yazoo County, Mississippi.³⁷ The work in the upper Tensas Basin is the result of excavation and survey in 1963 and 1964. All the sites (on Figure 2) that are starred are excavated sites. These are test excavations, no major excavations in the Tensas sequence in contrast to the rather major excavations at Lake George. But we feel that we have been able to put together, with the 26 sites that were tested and some 125-130 sites found in survey in the upper Tensas, a tight sequence which recently, and happily, has been tied into the absolute chronology by C14 dating. The lower Yazoo sequence is based on C14 dates, or parts of it going back to Bayland, from excavations at Lake George.

We will focus today on the so-called Troyville-Coles Creek; I do not like that term at all. In fact, several years ago Phil Phillips and I decided there was not any such thing as Troyville. We have probably recanted on that now, but the problem here is that Troyville represents the kind of problem that often happens in cultural typology. It was set up by a strong-minded individual who had a very good grasp of the local archeology and, as you perhaps know, based primarily on the excavations at the Greenhouse site.³⁸ And indeed, there is something one can call, and perhaps should call, Troyville at Greenhouse. But going north away from there, for example in the lower Yazoo, there is just nothing that you can call Troyville. There are none of the marker types up there and so if you talk about Troyville and Coles Creek as if it was a culture or if it was a time period, you have a blank in the lower Yazoo. So we have done Jim [Ford] dirt by revising one of his own terms and throwing it back at him, much to his chagrin, the Deasonville Culture, which we believe in very strongly. This is the culture that he first found at the Deasonville site here in Yazoo County; well, Henry Collins found it originally, but Jim used it as a marker for this cord-marked pottery in the hill-oriented culture, and we found this a very useful concept because, indeed, we have a lot of it and it comes down across the area; it even gets down to Greenhouse in small quantities. There was Deasonville at the Peck site as Iim [Ford] recognized and published some 30 years ago in his first description of the stratigraphy in this area.³⁹ He had 2 ft. of midden that he then called Marksville, Deasonville, and Coles Creek, and he was not sure at that time how Deasonville fitted in with his Marksville and Coles, and whether Coles Creek and Deasonville were coeval or separate. I would say he was correct in finding these three phases and they are in the order that he felt with Marksville followed by Deasonville and then Coles Creek.

What I mean by Deasonville in this discussion is this cord-marked tradition that undoubtedly is coming down from the north. It is a clay-tempered ware, "Woodland-like." It has along with it a lot of redfilming and not very many other decorated types except for this wonderful type French Fork Incised. I have heard of it in the Caddo area, of its affiliation with Crockett Curvilinear Incised and I think it has some. But this

³⁶Philip Phillips (1970) *Archaeological Survey in the Lower Yazoo Basin, Mississippi, 1949-1955.* Papers of the Peabody Museum of Archaeology and Ethnology, Vol. 60. Harvard University, Cambridge, Massachusetts.

³⁷Stephen Williams and Jeffrey P. Brain (1983) Excavations at the Lake George Site, Yazoo County, Mississippi, 1958-1960. Peabody Museum of Archaeology and Ethnology, Harvard University, Cambridge, Massachusetts.

³⁸James A. Ford (1951) Greenhouse: A Troyville-Coles Creek Period Site in Avoyelles Parish, Louisiana. Anthropological Papers 44(1). American Museum of Natural History, New York.

³⁹James A. Ford (1935) Ceramic Decoration Sequence at an Old Indian Village Site neat Sicily Island, Louisiana. Anthropological Study No. 1. Louisiana Department of Conservation, Baton Rouge.

French Fork tradition is a curvilinear incised type with varying kinds of background treatment, as for example punctated, and there are varieties of punctated backgrounds in Coles Creek. There are also incising to fill in areas and in some cases even rocker stamping. We have set up varieties of all these. We can sort out the French Fork through time and when one looks at one of Jim's seriation charts one sees French Fork running from Troyville times up through late Coles Creek. I would say that there are many varieties of French Fork that we can separate out and make a finer breakdown into a series of rather tightly defined ceramic complex that we call phases.

We have talked about the spread of Hopewellian communities. I suggest they are coming down from the north. Jim would not have that. Jim Ford has been like a weathervane on that, as to whether it is coming from the north to south to north again, but I think Jimmy Griffin has been really consistent in a more southerly movement from the north. But around the time of Christ and in the two centuries thereafter, there is movement of peoples throughout much of this area. For example, the Helena Landing site⁴⁰ that Jim reported a few years ago is a good example of a very tight little site with cross-hatched rims, the bird design, copper pan pipes, elaborate tomb burials. There are not any other sites like that nearby. Indeed if one just plots the distribution of cross-hatched rims, which I feel are a very good horizon marker for these classic Marksville ceramics, it has a very discontinuous distribution. I can think of about six sites from the mouth of the Ohio down to Marksville that have this classic Marksville material. That's the implantation of this ceramic tradition and elaborate burial tradition.

I won't argue now as to what is the nature of Tchefuncte burial mounds, if they exist, because I do not think the data are too clear, but certainly this was happening, and I think one can look, turning to the Caddo area, to some of the same thing. There is a site on the Ouachita—the Kirkham site⁴¹—that is certainly a good example of this. That vessel from Coral Snake is certainly right on this time level and has some relationship to the Saline Point site north of Marksville that Moore excavated.⁴² So you have this implantation.

Then we have a development taking place in this area that we call Issaquena or, if you prefer, late Marksville, in which the characteristic zoned rocker stamping is very prevalent and along with it the characteristic U-shaped lines that characterize the classic Marksville material. And this elaborates into a vigorous culture. It is very surprising how homogeneous it is. The cross-hatched rim in this late Marksville is gone entirely, so is the bird design. The little vessels with fairly complex designs of classic Marksville are gone. We can recognize rather easily these two temporal divisions between early and late Marksville.

I have been talking about primarily sites within the alluvial valley itself. There are complexes in the hills which combine cord-marked pottery with rocker-stamped pottery in the same complexes. Jim Ford found this 30 years ago, and there are a number of sites listed in Ford (1936) which form surface collections in the hills that showed this complex and in this case we have not been able to separate early from late Marksville. I think it is a historic thing that these two were being made together. I say that because elsewhere in the valley we have deposits that show mixture of Deasonville cord-marked with the stamped ware of Marksville, but we have in all cases in the lower alluvial valley been able to separate them out and show them to be temporally distinct and one following the other. But in the hills I would not be a bit surprised to see the same thing, possibly on the other side of the river, not with cord-marked pottery—it is rare west of the Mississippi—but mixed with this other resident traditions such as this sand-tempered sort of thing happening here.

Why does cord-marking skip around as it does? There is a rather definite discontinuous distribution of cord-marking. It does show up in fair quantity at Greenhouse, for example, but there are other sites about the same time where it does not occur. Another classic example is the way that red-filmed pottery, which is very popular in some Deasonville sites, making up 15% or more of the pottery, got out of sequence entirely

⁴⁰James A. Ford (1963) *Hopewell Culture Burial Mounds near Helena, Arkansas*. Anthropological Papers 50(1). American Museum of Natural History, New York.

⁴¹S. D. Dickinson and Harry J. Lemley (1939) Evidences of the Marksville and Coles Creek Complexes at the Kirkham Place, Clark County, Arkansas. *Bulletin of the Texas Archeological and Paleontological Society* 11:139-189.

⁴²See Moore (1912):495-500.

and has a very limited distribution across the river, not down the river.

In the areas that I have delimited on Figures 1 and 2, we certainly see continuity of a breaking down of the classic treatments of rocker stamping and the broad U-shaped lines. The lines get less and less deep, then the stamping gets very sloppy in this Troyville late plain rocker-stamping. The dentate rocker-stamping drops out entirely and we have made a distinction in our typology between the dentate stamping and the nondentate or plain rocker stamping, and we see this plain rocker stamping continuing. I would certainly agree that there is continuity here. It is certainly in the Greenhouse area where the next phase, the Troyville, does have this plain rocker-stamping along with some of the varieties of French Fork and other types as Jim has described them. Elsewhere, turning north to the Tensas and the Yazoo, this is not true.

We had a very interesting development in dealing with this post-Marksville time period. We have a period of regional differentiation, where there is extreme homogeneity in late Issaquena times over this broad area; in the next time period this is just not true. Indeed, we have a regional tradition along the lower Yazoo and this is reflected by the terminology here: the Deasonville and Bayland phases, and over in the Tensas in the Indian Bayou and Marsden phases. For example, in the Marsden phase we have practically no Troyville Stamped, but we have a fair amount of cord-marking, a lot of Woodville Red-filmed, which is a red filming with incised areas around it. In the Indian Bayou material we have the red and white ceramics, and certainly the first complicated painted ceramics in this portion of the lower valley is technically very good.

As far as reflections to the west are concerned in the period A.D. 400-600, I certainly say that there are some. One of the rocker-stamped sherds from the Davis site is Troyville Stamped, and only one.⁴³ The rest of them are, as George Quimby noted, Chevalier Stamped, an overall rocker-stamped type that covers entire large portions of the vessel, not enclosed by incised lines, and a later type which occurs in some of the Deasonville phases.

In the upper Tensas there is a very heavy occupation during the Marsden phase along the edge of Bayou Macon, a series of big sites and one of their characteristics is the presence of pits, not just trash pits, as they had fires in them. Some of these may be something like the large pits or "bathtubs" that Ford found at the Troyville site. They are very large, 6-8 ft. long and 5-6 ft. deep and often with an indication of fire inside them.

I have indicated that there is continuity from Marksville into Deasonville, and we see it in the ceramics. There are new things, sufficiently different to warrant separating these things up. I would not agree with Jim that this segmentation of the stream of culture is a purely arbitrary thing. I think we have to make it on the basis of the best evidence we have at hand and when we look at a collection from a short time span site that looks like a homogeneous complex, this reflects what was made by a group of people who lived there for a relatively short period of time. We do have these kinds of collections from excavated sites which allow us to segment our sequence.

I do not like to speak when Jim's not here about when temple mounds came into the Mississippi valley, but he raised the point about mounds. One of the things I noticed yesterday, people kept talking about mounds in the Caddoan area without any qualifying terms and I am not sure what kinds of mounds you people were talking about, whether you were talking about flat-topped temple mounds or nice little conical burial mounds.

<u>Webb:</u> The Caddoan area seldom has temple mounds and it has only a comparatively few of the small burial mounds. It has a lot of other kinds.

Williams: A lot of amorphous mounds.

<u>Webb:</u> Some of them are amorphous, and some of them are combined; some of them are mounds which cover house ruins. We have half a dozen kinds but not many of them are classic Adena or classic temple mounds. They are a different kettle of fish.

⁴³H. Perry Newell and Alex D. Krieger (1949) *The George C. Davis Site, Cherokee County, Texas*. Memoirs No. 5. Society for American Archaeology, Menasha, Wisconsin: p. 136.

Williams: One can see in the lower Yazoo and the upper Tensas a piling up of dirt in heaps and piling up midden deposits, sometimes capping these midden deposits with clay. These often serve the later people on these sites as bases for their mounds; they would use these old heaps as bases for their temple mounds. Here I am speaking of a flat-topped structure that served as a sub-structure for some kind of building. There are large midden heaps underneath the Greenhouse mound. Too often we have not dug these mounds well enough to know what the shape of these heaps are. Some of them may have flat tops. Certainly one can look at Crooks and know that they did build a platform with a flat surface and put some burials on it. Is that a temple mound? Not in my definition. I think we are not making a correct distinction of the different kinds of mounds. The flat-topped mounds centered around the plaza constitutes a particular orientation which I am absolutely convinced does not come into the lower Mississippi valley before Coles Creek times. In Coles Creek times, however, we see the introduction of the temple mound, most often in a plaza arrangement.⁴⁴

Finally discussing Coles Creek in some detail, w can see some continuity within Troyville or Deasonville. The French Fork types and varieties continue; it is obvious that early in Deasonville times important influences as far as French Fork designs are concerned are coming up from somewhere in the Gulf Coast area. Some of the material, for example from the Marsden and Neeley sites, which are basic components of the Marsden phase, are very Weeden Island-looking vessels with designs and surface treatment much like Weeden Island.

We have a developmental sequence in the classic type of Coles Creek Incised. We begin in some late Deasonville complexes that have a very crude variety with just a few lines around the rim and no care as to application, Then in the Sundown phase (see Figure 2) we have a very early variety with no more than two or three lines around the rim and very large triangular punctates. The triangular punctates become in the classic phase very neatly applied and with the overhanging incised lines above them. I think that what we can call the Coles Creek complex first takes place in the southern part of the Tensas area and north of Marksville. All the evidence seems to point in that direction at present. I have not mentioned anything about the Caddoan area with respect to this early Coles Creek, because I do not think there is anything to say at the moment. I have not seen any material from the Caddoan area that I feel is coeval with our early Coles Creek development.

Webb: The Sundown phase?

<u>Williams:</u> Yes. I have not seen anything over here that looks like that. You certainly do have material in the next phase or the classic Coles Creek: the phases I have called Aden and Ballina. The Ballina material has the classic overhanging lines, the very nicely applied punctates under those, well done, the Coles Creek Polished Plain, the well-executed French Fork designs—this whole complex. And it does indeed come occasionally into the Caddoan area, but only occasionally.

There are some colonies going up [to the lower Ouachita River] from this development, and it would be surprising if there were not some of this Ballina material going up into the lower Ouachita area. Pickett's Landing is what we have termed the Classic Coles Creek at Greenhouse, and some of it gets into the lower part of the Red River, up the Red River away from the its mouth or from the Greenhouse site itself. In the Red, we put what Clarence Webb has called Coles Creek as later Coles Creek. Webb's Coles Creek. This is not derogatory or anything.

Over on the Ouachita we have some of the late Coles Creek and of the lower valley type, and some of this Caddoan late Coles Creek is in the Ouachita itself. Over in the Tensas sometime about A.D. 1050 we have early Plaquemine beginning. Now, again, the problem of segmentation of late Coles Creek and early

⁴⁴Tristram R. Kidder (1998) Mississippi Period Mound Groups and Communities in the Lower Mississippi Valley. In *Mississippian Towns and Sacred Spaces: Searching for an Architectural Grammar*, edited by R. Barry Lewis and Charles Stout, pp. 123-150. University of Alabama Press. Kidder (p. 130) indicates that the arrangement of mounds around a central plaza began ca. A.D. 800.

⁴⁵See Mark A. Rees and Patrick C. Livingood (2007, editors) *Plaquemine Archaeology*, University of Alabama Press, for the most current thinking on the Plaquemine culture.

Plaquemine is one of these classic examples, I think, of a very obvious continuity with little or no new types coming, merely varieties changing so that we can recognize enough new varieties in early Plaguemine that are different from late Plaquemine. The sequence Tchefuncte, Marksville, Deasonville, Coles Creek, Plaquemine: there's nothing wrong with that sequence. It is a true reflection of the culture history of the lower valley.

If we are going to be able to utilize C14 with our more precise dating, if we are going to be able to look across wide areas, and make a more carefully defined statement that there is Coles Creek in the Caddoan area, we have got to get down to this finer typology within the ceramics and finer typology within our cultural complexes as well.

Webb: Where does Chase Incised come in, where flat rims with lines around the rim come in?

Williams: Those are two different things.

Webb: I want them to be two different things.

Williams: Chase is early, and in fact it occurs in Deasonville context. Chase is a pre-Ballina type. I think there is probably a time when the Sundown and Deasonville complexes have Chase in them at the same time.

Webb: Coles Creek Incised with a line on a flat rim?

Williams: That is a later thing. It is absolutely absent in Sundown. It is in classic times and later.

Webb: And French Fork, where does it drop out?

Williams: It is beginning to drop out in the Balmoral phase. By early Plaquemine it is gone in any recognizable form.

Webb: And Rhinehart?

Williams: Rhinehart is a type I would rather not get into.

Webb: Or Churupa?

Williams: Churupa is in the Marksville time period.

Webb: What about whatever kind of punctated ware you have along there?

Williams: We do not have any, or only very little. I cannot say very much about punctations on the basis of data from either the Tensas or the lower Yazoo. It does occur here in the lower Red, in the Red River mouth, where the Rhinehart site is but I am not too sure of it as we go up the river. This punctation is just not a very important trait.

For example, in some of the Deasonville phases it does not exist as a decorative technique in any way, shape, or manner. Certainly it is in some of the Sanson site materials that looks like late Coles Creek and early Plaquemine.

Webb: Some of the Sanson pottery is darned good Bossier.

Williams: Alright.

Following the early Plaquemine in the Tensas we have the Fitzhugh phase, developed Plaquemine.

At the Crenshaw site, most of the Crenshaw Coles Creek is in the Balmoral-late Coles Creek time

period.46

Webb: When does the painting, red filming of French Fork occur in northeastern Louisiana? Do you have any?

Williams: It is earlier than this. It would be down in Deasonville times.

Webb: What are you going to do about the Crenshaw vessels. They are French Fork with red filming.

Williams: How many are there?

Webb: Quite a few.

Williams: Several?

Webb: Yes.

Williams: We have a few of that, but I would rather make the temporal distinction on the overall look of the French Fork Incised, rather than on red filming because red filming comes in and out of our sequence. We have Yokena, for example, with French Fork, just a few with red filming. I would not call Yokena with red filming early in Marksville but it certainly is identifiable as Issaquena, considering the shape of the lines and the designs on the vessels which are then red filmed.

<u>Gregory:</u> Weren't there some vessels from Crenshaw with the line on the lip?

Webb: Yes.

Gregory: Would you put that in Ballina?

Williams: You have to get the flattened lip. The characteristic Deasonville, almost all of them, have rounded lips. Then in classic Coles Creek with the overhanging lines, and even in Coles Creek Plain, flattened lips seem to come in. You have to have the flattened lip before you can have lip lines. Then in late Balmoral times, it is pulled out into this very thin lip, a lot of which I have seen in the Coles Creek here.

Webb: You cannot say the flattened lip comes late in Coles Creek?

Williams: I would say it is in the middle [Coles Creek].

Webb: Wide flattened lips?

<u>Williams:</u> Yes, wide and expanded. Then you get the big, straight, beaker vessel, which is where you can get the characteristic lines on the lip with Coles Creek.

Looking in the other direction, we have been talking about things going out to the Caddoan area, how about things coming the other way? The time that we see Caddoan connections are primarily in late Coles Creek, early Plaquemine. At Lake George, we have more of this information than almost anywhere else, coming from levels that are unfortunately mixed with both early Plaquemine and late Coles Creek. That is the time we begin to get engraving for the first time. We get fine-line engraving, some of it of a French Fork

⁴⁶For information on the Crenshaw site, and some of the kinds of vessels being mentioned here, see Frank F. Schambach (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, and James H. Durham and Michael K. Davis (1975) Report on Burials at Crenshaw Mound "C." *Bulletin of the Oklahoma Anthropological Society* 23:1-90. See also Harry J. Lemley (1936) Discoveries Indicating a Pre-Caddoan Culture on Red River in Arkansas. *Bulletin of the Texas Archeological and Paleontological Society* 8:25-55.

design, but it is a much freer, open design than we have ever seen in any of the French Fork. And we get some excising on very highly polished wares. These things are very foreign to anything in the standard Coles Creek tradition—not the polishing, of course, but this very fine-line engraving.

Unidentified: Cross-hatched engraving?

Williams: No cross-hatched engraving. That comes much later.

It is also at this time—somewhere around A.D. 900-1000 that we begin to get our connection with Cahokia. And as far as really good things that we would say are really developed Caddoan, it is not until Plaquemine times, in fact quite late Fitzhugh, for example, that we get things like Maddox Engraved in sufficient amount to say with certainty that this is Maddox Engraved. I would not want to say that there is not an engraved tradition out here which is earlier than anywhere in the lower valley. And the thing that surprises me is why they did not go downstream and affect the ceramic traditions down there earlier. Again, it is fairly easy to go down the Red River but they certainly did not seem to. There is a blockage, a raft on the Red, or something that prevents the downstream spread of this kind of influence to affect the ceramic tradition of the lower valley in any substantial way. Turning to evolutionary rather than diffusionist explanations for culture change—I feel strange sitting on the opposite side of Jim Ford on this—but I feel that we can see in late Coles Creek, and especially in some of these vessels with the rather thin lips, a beginning of a break there which then ultimately comes into our classic Plaquemine carinated vessel. I think I can see, in the data, particularly from the lower Yazoo, this sequence of development, which then produces the very characteristic carinated vessel and we, indeed, get some of the engraving or hard paste incising (whichever it is) in this area.

Webb: Is this in Balmoral?

Williams: No, this is in Plaquemine times.

Webb: No, I mean the first break.

Williams: Yes, this is in Balmoral. Engraving of any frequency—the types such as Anna⁴⁷ and Emerald—is not in early Plaquemine. I have mentioned a few sherds, but they look like trade sherds. They are not a resident type at all. When engraving becomes a resident type, it is in late Plaquemine times, at the same time you have Plaquemine Brushed, for example.

Webb: Crockett Curvilinear Incised seemed to get to the Greenhouse site possibly before engraving did. Do you have anything that looks like Crockett into your area, and if so, where?

Williams: Yes, in French Fork. It seems to me that Crockett is so many different things. I would say there are a couple of varieties mixed up in Crockett but I would say that some of the connections could be as early as this.

Webb: Central disc and scroll?

Williams: Yes, as early as late Coles Creek. I do not think there is much argument on that.

<u>Unidentified:</u> What about Davis Incised? Do you have any comment on that?

Williams: I would say it is certainly not classic Coles Creek times. I think its connections are more with late Coles Creek.

Webb: Pretty darn close to Greenhouse Incised.

⁴⁷Ian Brown (1998) Decorated Pottery of the Lower Mississippi Valley: A Sorting Manual. Mississippi Archaeological Association and Mississippi Department of Archives and History, Jackson. Brown (1998:48, 53) recognizes Anna Incised, but no Emerald ceramic type, while Phillips (1970:40) considered Anna to be L'Eau Noire Incised, var. Anna.

Williams: Yes, very close to Greenhouse, and Greenhouse is late Coles Creek.

<u>Jelks:</u> What disturbs me is exactly the same kind of differences that Webb told us of, in the Coles Creek ceramics in this area.

Williams: I think you ought to have a name for this and maybe call this a phase of Coles Creek culture.

Webb: Looking at it from over on this side, as Coles Creek came into northwestern Louisiana, with little projections into East Texas and into southern Arkansas, in a few places Coles Creek occurs with either Troyville or Marksville (we have not been able to distinguish anything that we could separate out and say is Troyville, but we just say it is stamped because usually these are sherds and you do not see the rim) on sites like the Kirkham site in Arkansas and the Fredericks site over here. Following the stamped tradition, there are Coles Creek Plain and Coles Creek Incised, with direct or incurving rims and rounded or flattened lips; some have a single incised line on the flat lip. Incised lines number 1-5, encircle the outer rim, usually well-spaced and varying from carefully executed to somewhat sloppy or scratchy. Both rounded and pointed tools were used. Chevalier Stamped occurs rarely and French Fork Incised is also infrequent. Triangular or rounded punctations may occur below the lowest incised line; there is no appreciable difference in the technique of incising without subjacent punctations and with triangular punctations. Sometimes the incised lines do not look any different whether they have triangular or rounded punctates; they are not always sloppy.

<u>Williams:</u> Interestingly enough, the use of punctations is rare in the very fine variety of Coles Creek Incised called Mott that is in the late Coles Creek, where you have the very thin rim and there are as many as 16-20 lines sometimes.

Webb: And practically vertical walls.

Williams: Yes. This punctating trait pops up again in early Plaquemine in stuff that is like Hardy.

<u>Gregory:</u> Which way does brushing seem to come into the Tensas?

<u>Williams:</u> Brushing is not in the Coles Creek complex. I did not mention that we have brushing in Deasonville—Salomon Brushed—where the brushing is part of a general surface roughening technique that you have in with the cord-marking. And it drops out entirely, not to appear again until late Plaquemine times. There is an absolute absence of brushing from sometime around A.D. 500-600, and does not show up again until around A.D. 1300. I do not know where Plaquemine Brushed comes from.

<u>Webb:</u> Bossier Brushed and Plaquemine Brushed are virtually interchangeable, including the diagonal crossing brush strokes or lines.

Williams: I think maybe in Plaquemine times you have real interchange across here.

<u>Webb:</u> One of the unfortunate things is that some of the distinguishing characteristics of these pottery cultures which intervene in your area between Marksville and Coles Creek are featured by pottery traditions or decorated traditions that are completely absent over here. The cord-marking we do not see at all. We do not have the zoned red filmed. It leaves Coles Creek Incised as about the only type that occurs in those periods that also is found here, and it makes it difficult to try to swing too much time differentiation on variations in one single pottery type, Coles Creek Incised.

<u>Unidentified:</u> There was some cord-marking at the Marksville site. We got it also up around east of Clarksdale, up against the hills.

Williams: Carter Bayou.

<u>Unidentified</u>: Where the sand-tempered material is cord-marked and fabric-marked, were they brought there at the same time as the intrusion of the early zone-stamped pottery?

Williams: Right.

Griffin: There's no question that when the zone stamping and the other Hopewellian influences die out, then there is a period of drabness in the north, post-Hopewell, early Late Woodland material. And the only place where it does not really happen, where there is real florescence, is Weeden Island.

Williams: I will say just this one thing about cord-marked pottery. I have seen a cord-marked sherd from Marksville. There are not very many. In Issaquena times, in late Marksville times, there is no cord-marking with the classic Issaguena material anywhere in this area.

I would certainly want to make a distinction between the dentate and non-dentate stamping. There is indeed non-dentate-stamped, plain rocker stamping, in early Marksville but the dentate drops out in Troyville.

Webb: Jim Brown, do you want to ask any questions about Coles Creek from the standpoint of what you see in your area?

Brown: I have these general questions about the particular placement of such things as Chase Incised and what would be something like Greenhouse Incised.

Williams: How many lines has it got?

Brown: Just one and overhanging.

Williams: What is it associated with?

Brown: From a village context, presumably resident ceramics.

Williams: Does it have a line on the lip?

Brown: Yes.

Williams: There is a variety on the Deasonville time level called Silver Creek which has those characteristics.

Brown: It is quite possible a lot of the attributes have gotten recombined in the Caddoan area and they do not occur in the same chronological context as they do in your area.

Williams: Yes.

Brown: Isn't that possible?

Williams: I think so. Take a thing like red filming. It just does not exist in classic Coles Creek or even in late Coles Creek. It has dropped out entirely: it is no longer a decorative technique. But in some of the Deasonville and Bayland phases, 10-20%. It is not that they did not have the materials for it; they just did not use the technique.

Brown: Also, areas separated by incised lines which would be alternated between the natural and the red filmed?

Williams: Some of that would be Woodville. 48 It sounds as if you have an earlier horizon than Coles Creek.

⁴⁸Woodville Zoned Red, var. Woodville (see Brown 1998:67).

<u>Brown:</u> There is one vessel which has the triangles, punctations, and designs which fall in the French Fork type. The shape is right, too, and the upper body areas are slightly bulging.

<u>Williams:</u> It sounds to me like something we would never have in a Balmoral or late Coles Creek context over in the lower valley at all. We just do not have any red filming in any of the classic Coles Creek at all.

Gregory: How about long-stemmed pipes?

Williams: Absolutely never, never see anything like it.

<u>Webb:</u> The only place they occur in Coles Creek context is in Arkansas, as far as I ever heard, or maybe you might have in Oklahoma.

<u>Brown:</u> Yes, there are a few but when they do occur they look like trade pieces. The V-shaped pipe is the resident kind of pipe, quite spectacular, though.

<u>Webb:</u> Out of this has always come into the question: were the long-stemmed pipes of the early Caddoan people an independent invention of the late Coles Creekers just before the Caddos came in or were the Caddo peoples making the long-stemmed pipe and the Coles Creek folks in contact with them started making the same kind of thing?

<u>Hoffman:</u> Up in Crenshaw, the Coles Creek pipes have incised lines below the top of the bowl, at least the ones I have seen that Ray Wood described⁴⁹ and then at the Old Martin Place I think that Pete Miroir says that they have a pointed forward end.

Williams: I think they must have picked up that filthy habit after they left the lower valley.

Webb: There are two or three features about the manufacture of these: the method of attaching the bowl to the stem is different in those types that occur in Coles Creek context and those that occur with this later Caddoan. Some of them are built in one piece. The portion of the stem that has the bowl attached to it was all made at once and then the other stem attached to it in segments to build it up, whereas in most of the later Caddoan long-stemmed pipes, whether they are the small or the thick, the bowl is made separately and has a couple of flanges where it is attached over a hole that is drilled in the pre-manufactured stem. This needs to be studied.

<u>Jelks:</u> There is a nice sequence of this.

Webb: If somebody will work it out.

<u>Gregory:</u> There are one or two pipes in private collections on the lower Ouachita in a Coles Creek context. One that I have seen has a French Fork motif around the bowl and it looks like a sort of attempt at a long-stemmed pipe, not blocky at all; it sits on a long, sort of finger-shaped base. It looks a little like some of the long-stemmed pipes, only the stem is too thick and the thing has no Caddoan balance.

<u>Webb:</u> While we are describing things about these long-stemmed pipes, I may as well refer to the sequence. You would think as cultural development that probably they would make the slightly shorter, larger, heavier-stemmed pipes first and then develop the long, thin, delicate ones later, but the reverse seems to be true. The Coles Creek pipes and the Alto period pipes are the small, delicate, long-stemmed and the later Haley period has the larger stemmed, shorter, thicker, with larger bowl.⁵⁰

⁴⁹W. Raymond Wood (1962) *The Crenshaw Site: A Coles Creek and Caddoan Mound Group in Miller County, Arkansas.* University of Arkansas Museum, Fayetteville.

⁵⁰See Michael P. Hoffman (1967) Ceramic Pipe Chronology Along the Red River Drainage in Southwestern Arkansas. *The Arkansas Archeologist* 8(1):4-14.

<u>Brown:</u> I have pipes with that sandy paste pottery which, at least there is one complete one, has a long stem with a high bowl and it is about as big around as the end of your finger. There may have been a kind of fluctuation in shape.

<u>Webb:</u> Jimmy Griffin, the subject of sand-tempered pottery keeps cropping up. Would you like to add anything? The question that occurs to many of us: is this a real horizon that we should be finding all across or is this very spotty and more a tradition than a valid kind of horizon as it occurs generally through the Southeast?

<u>Griffin:</u> You have a clear continuity from the Texas area across, but I do not know. I have a sneaking suspicion that outside of certain local areas it would be a sad mistake to try to tie these together in terms of temper because I cannot see that the sand-tempered material that crops up in northern Alabama in the Alexander series⁵¹ would have any possible connection with materials down along the coast area, for example, and the southern part of the Caddo area.

Webb: With Tchefuncte?

Griffin: I am not even sure that the Alexander complex has a specific and a direct connection because of the tempering with a minority group in Tchefuncte sand-tempered, because the sand-tempering occurs in some Tchefuncte sites and does not occur substantially in other Tchefuncte sites. I would guess that these are local women who are getting mixed up as to what they ought to do, trying to confuse the archeologist, and I do not think I would try to do it. It does not seem to me that this is anywhere near comparable to the fiber-tempered pottery or to cord-marking. I think that there might be more significance on the basis that I mentioned the other day of the southern area's emphasis upon plain surface pottery. This seems to me to make more sense in terms of areal continuity and probable transmission of concepts or traditions.

<u>Webb:</u> The question arises: Is a lot of this heavily sand tempering or grit tempering fortuitous; do the local clays just happen to have a lot of sand in them? In the same areas, however, at another period, you will find darn good clays and perfectly well-made pottery. Would you express an opinion about this so that we can have some feeling as to whether we can forget about this being accidental or fortuitous and figure out whether there is a considerable tradition like fiber-tempered or whether these are local variations? There was intentional use of sand as a tempering material?

<u>Griffin:</u> This is perfectly true but I do not think I would get excited about it in terms of widespread horizons or anything like that.

<u>Webb:</u> It is interesting that it has cropped up more in excavations of recent years as we have gotten into more of these smaller sites away from the larger villages.

The question remains: is this accidental or is this the use of a material which was readily available?

<u>Griffin:</u> That is the way it looked up in the northern part of the delta area where the people coming down in the hills and the sandy streams where the soil itself is very sandy; that is where we got our sandy-tempered pottery and that was why we set it up as a separate areal type from materials farther over in the delta where you did not get the kind of clay.

Some of the fiber-tempered pottery is pretty sandy and if you picked it up and were not looking at it you would think you had sand-tempered pottery.

<u>Bollich:</u> I wonder perhaps if this isn't a possibility. There really is nothing to back it up but possibly this is

⁵¹See Rebecca Saunders and Christopher T. Hays (2004) Introduction: Themes in Early Pottery Research. In *Early Pottery: Technology, Function, Style, and Interaction in the Lower Southeast*, edited by Rebecca Saunders and Christopher T. Hays. University of Alabama Press, Tuscaloosa, pp. 14-15 and Figure 1.2, and Kenneth E. Sassaman (2002) Woodland Ceramic Beginnings. In *The Woodland Southeast*, edited by David G. Anderson and Robert C. Mainfort, Jr., pp. 398-420. University of Alabama Press, Tuscaloosa.

associated if we assume that perhaps sand tempering is not that recent, although we know it can continue until recent times when that is all you get is sand-tempered pottery down on the coast. Isn't it possible that these are very small settlements that have been ignored and perhaps will crop up a lot more after you begin to look at these sherds of poorly made utility ware? There are certain variations to the extent that some is almost entirely sand, and I believe that there are sand lens in any stream bottoms, the lower Mississippi valley or anywhere else, but over in the valley you seldom see sand-tempered pottery. Now these people were probably very selective in the clays they used for making pottery and I think if sand is in there they meant to have it.

<u>Unidentified:</u> I wonder if perhaps sand-tempered wares have been ignored because it was not spectacular, perhaps it was generally plain and was disregarded when these types were set up. Whatever can be typed goes into a percentage figure; the rest is untyped and no one has really looked at it critically.

Webb: I think I would agree with you. If we would go back and look at our surface collections of village site sherds we would probably find some. Heretofore, if just 5-10% of the sherds are sand-tempered you do not pay too much attention if the rest of them are clay-tempered, for example. In checking back, though, in the original Tchefuncte report, somewhere around 15% of all their sherds were sand-tempered. And one of the things that looks like a direct connection with the Alexander series is this business of the nodes punched from the inside.

<u>McClurkan</u>: Further down the Texas coast, in the Beaumont area, people made pottery out of just fine clay or made it out of sand that almost wants to fall away; it is not nearly as easy to do one as the other and I would think that perhaps this is a pretty refined technique, making pottery, and perhaps they were concerned about their material.

<u>Unidentified:</u> I think these must be viewed as local problems, comparing this with the available clay and historical evidence before we talk about broad relationships.

<u>Jelks:</u> Up inland through a great area of eastern Texas, there is no doubt in my mind that they very carefully, very intentionally, made those sandy-paste pots. Whether they selected the clays that already had the sand in it or added the sand to a new clay, I do not know, but there are deposits readily available of fine clays without the sand and some people made pottery out of that but it is a different shape, a different kind of pottery. I think earlier people made a very sandy, undecorated, smooth sandy-paste pottery and there is no question at all that this was intentional, the sandy paste is intentional, because they had fine clays they could have used. But this correlation between the morphology in the shape of the pots and the sandy paste would indicate without question that this is intentional and not an accidental presence of sand in the paste.

Webb: Mike Hoffman's Hutt site sherds are not that greatly different from perfectly good clay, are they?

Hoffman: It is good clay. In fact, there are the Coles Creek style sherds at the site and a lot less sand in them.

<u>Unidentified:</u> I think there is a fundamental vessel shape involved in the horizon about which we are talking, here in this area, because there are conical-base vessels right on the Gulf on the coast of Texas and there are flat-based vessels inland. On the basis of shape, they are different things. But I do believe that these questions should be worked out reasonably and according to what stratification we have in the area just to see if in East Texas the sandy-tempered pottery started at Tchefuncte times and went all the way through to the historic. It is certainly not a horizon if this is the case, but a regional tradition.

Webb: The further down the coast apparently the more this crops up.

<u>Griffin:</u> I would like to ask Hoffman if he has looked at the zone stamped pottery that is said to come out of northern Arkansas.

Hoffman: That is northwest Arkansas?

<u>Griffin:</u> Yes. I was wondering whether that stuff is clay-tempered material or if it is not a fit-in with the material from the Cooper focus,⁵² and whether this has come up the Arkansas or whether it has come on that pincers movement around through Kansas City.

<u>Hoffman:</u> I have not looked at it. Certainly in our Ozark survey, we did not find any stamped pottery. What pottery we did find was all clay-tempered.

<u>Webb:</u> Any further observations, questions, remarks, objections? If not, we in Louisiana thank all of you for coming. It's been our pleasure to host the meeting. Nothing further? We're adjourned.

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BOOK REVIEW

The American Indian Oral History Manual: Making Many Voices Heard.

Charles E.Trimble, Barbara W. Sommer and Mary Kay Quinlan Left Coast Press, Walnut Creek, California, 2009

Reviewed by Pete Gregory

The times have changed. American Indian people, like indigenous population worldwide, have finally begun to impress scholars with the fact that in spite of centuries of colonial exploitation their cultures are alive and they hold ownership of them. Oral history and ethnology both have to listen to this new voice and come to understand the ethical and legal implications for the academic disciplines. These three authors bring unique experiences as well as "best practice training" to this small book.

The work is designed for use by American Indians and as such becomes a guide to non-Indian scholarship as well. The authors understand the need for oral history in American Indian communities and they also know that oral tradition is the source of tribal knowledge. Charles Trimble has discussed the problem of collection and maintaining traditions. His eloquent introduction takes the fieldworker to the heart of his personal experience, but it is a lament heard over and over in Indian Country,

"However, I often cringe when I think of what I missed in not recording on paper some of the experiences and wisdom of those tribal elders, which I was privileged to hear in my youth."

With these things said, this neat little manual lays out ethics and legal issues, with a more than adequate set of endnotes that carries the American Indian issues neatly into the world of indigenous people. These issues explain tribal and Federal law, and give references that help the fieldworker understand the dos and don'ts that separate these indigenous issues from other ethical and legal matters.

The other sections deal with best practice, most of the time as it is recommended by the guidelines set forth by the Oral History Association. This includes discussions of permission forms, access to the materials collected, archival concerns, and again, tribal and individual rights and privacy issues. These are important for any oral history practitioner and are made relevant here for American Indian historians.

The sections on everything from project planning and funding to equipment and suggestions for sampling and interviewing are all covered thoroughly, yet efficiently. The field forms are well designed, equipment is competently discussed in lay terms, and finally, there is an excellent bibliography that supplements the really fine endnotes that follow each section.

This work should be in the hands of every Tribal Historic Preservation Office. It answers lots of questions and raises others that need raising. It is a constructive tool in the preservation of American Indian culture and one that comes to that task with those "experiences and wisdom" that Trimble noted having heard personally.

This is a book for the American Indian people—it has knowledge and heart.

BOOK REVIEW

Our Unprotected Heritage:

Whitewashing the Destruction of our Cultural and Natural Environment

Thomas F. King, Left Coast Press, Walnut Creek, California, 2009

Reviewed by Mark Walters

Before becoming involved in archeology, I was a commercial nurseryman for thirty years in East Texas. Finally though, I had my fill of fighting weather, unstable markets, pests and yes, government agencies. After retirement I sought what I thought would be tranquility in the field of archeology. Archeology was a topic that I had been interested in since I was a teenager and I thought it would provide the peace-of-mind I was seeking. Wrong again.

Don Quixote had his horse Rocinante, and I have my truck, and we are all looking pretty beat-up from charging windmills. Like Thomas F. King, my particular windmill is the destruction of our cultural environment. When I first became serious about archeology, I was motivated by the concern for protecting a specific site on my property. Since then, I have become involved with various organizations that seek to preserve and protect all significant archeological sites. However, through the years, I have become increasingly dismayed at the failure of our system of laws and regulations to provide adequate protection for those sites.

In his latest book "Our Unprotected Heritage," Dr. King lashes out at what he describes as "whitewashing the destruction of our cultural and natural environment," not just the destruction of those environments, but the blatant effort by regulatory agencies to cover up that destruction. Dr. King, a self-proclaimed curmudgeon, draws on forty years of experience in the Cultural Resource Management (CRM) field to make his case. Dr. King has served as a government worker, heritage consultant, and advocate for local communities, and is widely respected for his popular books on CRM (King 2000, 2002, 2003, 2004, 2005).

Dr. King places blame on the guardians of our heritage, the often-uncaring government employees and self-serving agencies, all of who conspire to keep our heritage unprotected by promoting unintelligible (often- contradictory) regulations. This was not the intent of the original legislation but rather what it has evolved into, and increasingly it has become more so through time. In this book, he points out what he thinks is wrong with the system and what we might actually do to make it work. His injection of personal examples of how the system doesn't work should be an eye-opener to those schooled in resource management who believe all is well in this "best of all possible worlds." In fact, it is Dr. King's broad and lengthy CRM experience that makes this book unique.

From my personal experiences, I have learned that the government agencies do not want or appreciate your input or inquiries. In my case, in seeking information on a local project from the state of Texas regulatory agency, I had to resort to an Open Records Act request and even then my request was labeled "onerous." What I grudgingly did learn, for the year 2005, was that the state agency in question reviewed 6450 projects, not the 13,000 they advertised. Furthermore, the number of projects out of the 6450 for which an archeological survey was requested was 368. No information was forthcoming concerning the actual number of sites recommended for testing to evaluate their research significance, or the number of sites recommended for data recovery to mitigate their loss or destruction because of a proposed development. The number of instances in that year (or any other year that I could find) that the agency imposed fines or penalties on developers that had damaged sites proposed for development, or on looters that had dug on sites on state property, was zero.

This state agency projects themselves as enforcement tigers but in reality they are only "paper tigers," as the record clearly shows, forcing them to practice "hold-um or fold-um" strategies to avoid embarrassing political conflicts. In the meantime more sites are destroyed or determined by the state, with or without input from the concerned public citizen, to not be important.

Dr. King primarily deals with what he calls "light green" laws, two of which are the National Environmental Policy Act (NEPA) and the National Historic Preservation Act (NHPA). These laws are supposed to protect the public from actions of our government by requiring the government to take into consideration its effects on the environment. (I admit I struggled with "all those bloody acronyms" in place of long titles, even though King went to great care to spell them out at the start of each chapter. I found a "cheat-sheet" lessened the confusion, a condition Dr. King described that was used by the agencies to further befuddle the public.) He summarizes these acts and how they have turned into failures by citing real life examples based on his forty years experience in the field. One of the glaring problems with environmental impact assessment and CRM work is that the clients whose impacts they are studying hire the firms that perform these services. Talk about a conflict of interest!

Dr. King concludes by making recommendations to the current U.S. President, telling agencies to in effect "clean up their act." Oh, he adds that there could be new laws passed to improve the situation, even going so far as to discuss amending the constitution, but the real focus goes back to the bureaucracies that we have created to oversee our cultural environment laws.

Dr. King's latest book is probably not going to make any bestseller list. However, I readily recommend it, along with his more scholarly texts, to all parties concerned with the protection of our cultural heritage.

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2009 CADDO CONFERENCE REPORT

Amanda Regnier

The 2009 Caddo Conference was held at the Sam Noble Oklahoma Museum of Natural History in Norman from March 12 – 14. Luckily, the Oklahoma weather cooperated, and there were no blizzards or ice storms this time around! There were 100 registrants for this year's conference. The conference opened Thursday night with a reception under the mammoth in the W.R. Howell Pleistocene Plaza. Music was provided by the Cross Timbers Ramblers, led by Don Wyckoff and Kent Buehler. Twenty papers were presented during the day on Friday and Saturday, on topics ranging from Fourche Maline sites in eastern Oklahoma to the location of historic Caddo villages in east Texas. In between papers, conference registrants visited the book room and bid on silent auction items, managing to raise over \$800 for the conference. The conference concluded on Saturday evening with a Caddo Dance hosted by the Caddo Culture Club and the Hasinai Society.



The Cross Timbers Ramblers perform at the opening reception.



Jeri Redcorn shows her pottery and Phil Cross displays traditional Caddo clothing in the book room.



Chairperson LaRue Parker, Bobby Gonzalez, and Robert Cast present an award to Nell Murphy of the American Museum of Natural History in New York for her help in repatriating artifacts.



Crowd participation at the Caddo Dance.

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