CULTURAL DIVERSITY IN THE SOUTHERN CADDDO REGION

James E. Corbin

The earliest expression of Caddo culture in the southern portion of the Southern Caddo region is well known. That Alto phase Caddo culture had any effect on coeval societies and the subsequent cultural development in the area cannot be demonstrated. What happened after ca. A.D. 1100 has been much discussed, but the realities of that subsequent cultural development are unknown. It can be argued that what followed was a part of a larger cultural phenomenon of regionalization of societies within the broader Caddoan area. Some researchers (e.g., Story 1981:5-6) have argued that, at least in the extreme southern portion of the Caddo area, this localized regionalization reflects adaptations to changing environmental conditions. It can also be argued that the ensuing regionalization, a fact well demonstrated in the archaeological and ethnohistorical literature, may, at least in part, also be a continuation of a long standing ethnoenvironmental and macroeconomic adaptation that is as much Mossy Grove (Woodland) or even Archaic in its outlook as it is Caddo. I have suggested elsewhere (Corbin 1989: 119-124) a post-Alto phase phenomena of diffusion of some aspects of Caddo culture to Mossy Grove style cultures, an acculturative process that may have been still viable and ongoing in the early Historic period. The ethnographic literature suggests that southern Caddo cultural denota had expanded or was expanding beyond the traditional Hasinai linguistic area. This article addresses the first part of the discussion, the cultural variability evident in the archaeological and ethnohistoric literature and the possible sources of that diversity.

Cultural Diversity among Late Prehistoric Caddo Groups

Story and Creel (1982:30-34) introduced the term cluster to the various archaeological constructs in use in the southern Caddo area. The term cluster denotes a conglomeration of constituent groups (tribes?) which share a socio-political organization (the affiliated group) through time and space. The socio-political organization of the model for the cluster was derived primarily from the ethnohistoric model of socio-political organization constructed for the Late Caddoan period by Wyckoff and Baugh (1980:225-283). Furthermore, Story and Creel (1982) proposed a formal cluster, the Anderson Cluster, to represent an affiliated group on the upper reaches of the Neches and Angelina River drainages. Temporally, the Anderson cluster is divided into the Frankston phase (early) and the Allen phase (late). The Allen phase, like the previously defined Allen focus, is believed to represent the archaeological remains of the historic Hasinai Caddo, although the Anderson cluster encompasses a larger area than that delineated by the Spanish for the Hasinai. Story and Creel (1982:33-34) did not offer terms for the constituent groups of this particular cluster because they were “not confident that archaeologists can ever command enough well-controlled data to make identifications at this level practical.” Later, Thurmond (1985:185-200), following Story and Creel’s lead, delineated a Cypress Cluster in the Cypress Creek drainage basin. Thurmond also identified several sequent phases and a series of subclusters, which he suggested represented the constituent group alluded to by Story and Creel (1982).
Origins of Variability

Within the Neches-Angelina drainages, there appears to be three sources (the George C. Davis site, the Washington Square site, and the Pace McDonald site) for the introduction of Caddo style culture into the region. At the George C. Davis site and the Washington Square site, there is no evidence of a developmental sequence which produced the primary cultural features found at the two sites. Both sites appear to have been established as colonies at the junctures of major trail systems (and trade routes).

Prior to the establishment of these sites, the region appears to have been occupied primarily by Early Ceramic or Woodland period culture groups of hunter-gatherers (and possibly incipient farmers) characterized archaeologically by a sandy paste pottery (Bear Creek Plain/Goose Creek Plain), tiny Gary points, and corner-notched and stemmed arrow points (Catahoula, Friley, etc.). Story (1990) has suggested the term Mossy Grove as a rubric encompassing all of the sites in the southern Caddo region and southeastern Texas which exhibit these cultural characteristics.

Mossy Grove sites are common throughout the southern Caddo region and occur in localities often utilized by later Caddo cultural groups. Most commonly these sites occur on or near the terminus of low sandy ridges which project into tributary stream systems of the Neches and Angelina. While these groups appear to have no direct cultural relationship to the primary inhabitants of the George C. Davis or Washington Square sites, cultural debris from this earlier culture occurs at both of these sites. In addition, Late Caddo cultural debris often directly overlies the earlier cultural material at many sites in the region, indicating that both cultural manifestations preferred or at least intensively utilized those localities.

The question now becomes one of who and what cultural entities were responsible for the Late Caddo cultures of the region, and to what extent, if any, are the earlier Caddo cultures responsible for the cultural diversity of the Late Caddo groups? Other than the utilization of grog as a tempering agent, there is little in the primary cultural manifestation at the George C. Davis site to suggest that there is a direct connection between that occupation and the later Caddo groups.

GEORGE C. DAVIS SITE (A.D. 900-1250)

Holly Fine Engraved (30%)
Crockett Curvilinear Incised (10%)
Pennington Punctated Incised (10%)
Grog temper (90%+)
Bone-grog temper (less than 10%)
Brushing (0%)
Unfortunately, not enough is known about the Pace McDonald site to understand its relationship to other Caddo cultures of the region. The general consensus is that it is generally later than the George C. Davis site.

On the other hand, while not fully studied and reported (see Corbin and Hart 1998), the considerable excavations at the Washington Square Mound site in Nacogdoches, Texas, have revealed a hitherto unknown Caddo complex for the region. A series of radiocarbon dates indicate that this late Early Caddo or early Middle Caddo mound complex was occupied primarily between A.D. 1250-1450. The site structure indicates a series of three (possibly four) mounds arranged around a plaza. The southern mound (destroyed in 1930) and the western mound (portions of the base and primary structure are still partially intact) appear to have been structural mounds, while the eastern mound is a mortuary structure.

Excavation of two shaft graves (one containing a single individual and the other two individuals placed on top of the other) within the mortuary mound indicate a mortuary complex very different from that of Mound C at the George C. Davis site. Only a few exotic goods (a few columella beads, and non-local chert) occurred as burial offerings in each one. The primary surviving burial furniture was ceramic vessels, with an average of 15 vessels per individual arranged around the individuals. The forms and design elements of the vessels mirrored the tens of thousands of sherds recovered from the excavations in and around the plaza, although engraving dominated mortuary vessels. The vessels range from well-used utilitarian wares to well-made fine wares, although the latter predominated in the mortuaries. Most of the vessels from the burials are carinated bowls, shouldered bowls, and rimmed jars, but a bottle occurred at the wrist of each individual. In one of the burials, the bottle had been intentionally smashed; in the other, fire-burned earth, ash, and charcoal indicated a ritual (?) fire had burned under a large olla prior to closing the tomb. A small bird effigy bowl typical of the Late Caddo period occurred in one of the burials.

Although there are some correspondences between the Washington Square site ceramics and Davis site ceramics, particularly in the use of scroll motifs (but almost always engraved), and wares similar to some forms of Crockett Curvilinear Incised (but almost always on Dunkin-shaped jars), most of the wares and design elements show closer affinities to some Haley phase ceramics and Late Caddo ceramics (Maydelle Incised) than they do to the Davis site. While an undecorated ware occurs at the site, brushing (32%) of the sherds, often in combination with punctated or incised rims (Maydelle Incised), dominates the utilitarian wares.

WASHINGTON SQUARE (A.D. 1250-1450)

Nacogdoches Engraved
Washington Square Paneled
Reavely Brushed-Incised
Crockett Curvilinear Incised
Maydelle Incised
Pennington Punctated Incised
Grog temper (48%)
Bone-grog temper (45%)
Brushing (32%)

Fine line (brushed?) incising in rectilinear and curvilinear panels outlined by punctations or appliqued strips reminiscent of various Haley phase wares and Pease Brushed-Incised occur on many finer vessels. The concurrent use of incising, punctations, and engraving occur on some vessels. One design motif (Washington Square Paneled), always on carinated bowls, was rendered with punctations, engraving, incising, and by a combination of the three. Grog (48%) and bone-grog (45%) temper predominate at Washington Square, a strong contrast to the George C. Davis site.

Historic Caddo Clusters in the Southern Caddo Region

Sabine Cluster

In 1980, Corbin et al. presented data that suggest that constituent groups might be more readily identifiable within the archaeological record than one might suppose. This work, based on controlled excavations at two Spanish colonial sites (Mission Dolores de los Ais and Presidio los Adaes) and research focusing on Historic period mortuary and habitation sites on the middle Sabine reported by Jones (1968), suggested that drainage-specific ceramic traditions could be identified and that these traditions might well reflect known ethnographic entities, i.e., constituent groups.

Mission Dolores was established in the middle of the area inhabited by the Ais. Presidio los Adaes, and its associated mission, was established in the middle of the area inhabited by the Adai. It is not certain whether these two groups, the Ais and the Adai, were in fact Caddos. The Hasinai and others inferred that the Ais, at least, were not real Caddos. Nevertheless, they were a recognizable and definable group that occupied a particular part of the landscape. The work by Jones (1968) was within the confines of the area ethnohistorically (after 1779) supposedly identified with the Nadaco, a group recognized as one of the Hasinai Caddo tribes in the southern Caddo region.

SABINE CLUSTER

<table>
<thead>
<tr>
<th>MANY SUBCLUSTER</th>
<th>KINSLOE SUBCLUSTER</th>
<th>GILBERT SUBCLUSTER</th>
</tr>
</thead>
<tbody>
<tr>
<td>AIS AND ADAI</td>
<td>NADACO</td>
<td>WEST CADDIO</td>
</tr>
<tr>
<td>Emory Punctated-Incised</td>
<td>Henderson Plain</td>
<td>Womack Plain</td>
</tr>
<tr>
<td>Natchitoches Engraved</td>
<td>Natchitoches/Hodges Engraved</td>
<td>Womack Engraved</td>
</tr>
<tr>
<td>Ebarb Incised</td>
<td>Emory Punctated-Incised</td>
<td>Emory Punctated-</td>
</tr>
</tbody>
</table>
The Ais and Adaes Subclusters

The native-made ceramics (Corbin et al. 1980:158-207) at Mission Dolores de los Ais (41SA25) are dominated by Natchitoches Engraved and less so by Emory Punctated- Incised, Ebarb Incised (engraved at Ais), and an unnamed undecorated ware. These wares are consistent in terms of the paste and primary tempering agent. Bone (80%) is the primary identifiable additive to the clays used by the Ais potters for all wares. Patton Engraved, a marker type for the historic Hasinai Caddo groups to the west, occurs at Ais as a minor type, with either bone or no discernible tempering agent; we believe the ware is non-resident.

AIS

NATCHITOCHES ENGRAVED
EMORY PUNCTATED-INCISED
EBARB (engraved)
Bone temper (80%)
No brushing

At Presidio de los Adaes (Gregory 1973), the same four wares predominate, but the Natchitoches Engraved paste is almost always tempered with shell. The other wares at Adaes (Emory Punctated-Incised, Ebarb Incised, and an undecorated ware) are typically tempered with shell (60%) and/or bone (40%).

ADAI

NATCHITOCHES ENGRAVED
EMORY PUNCTATED-INCISED
EBARB INCISED
Shell temper (Natchitoches Engraved)
Bone or shell temper
Brushing very rare

Gregory views Natchitoches Engraved, Emory Punctated-Incised, Ebarb Incised, and the undecorated wares as resident for the area; i.e., they were manufactured by the local Adaes. Patton Engraved occurs at Adaes, but Gregory believes it is a non-resident ware. Womack Engraved also occurs at both Ais and Adaes, but in such minute numbers that this ware is also believed to be non-resident. These two localities also share another ceramic cultural feature: brushing as a surface treatment in nonexistent at Ais and
based on these data, Corbin et al. (1980:209-214) proposed two areally specific groups: an Ais Caddo group and an Adaes Caddo group.

I would now like to modify that view somewhat and propose two sub-clusters (or constituent groups), the Ais and the Adaes. The sub-clusters occupy both sides of the lower middle Sabine River drainage and are characterized by the ceramic types Natchitoches Engraved, Emory Punctated-Incised, Ebarb Incised, an unnamed undecorated utility ware, the absence of brushing on utility wares, and the virtual absence of grog as a tempering agent. Archaeologically, the constituent groups are delineated by differences in ceramic ware paste additives: the Ais by predominantly bone-tempered wares and the Adaes by shell-tempered wares.

<table>
<thead>
<tr>
<th>AIS CONSTITUENT GROUP</th>
<th>ADAI CONSTITUENT GROUP</th>
</tr>
</thead>
<tbody>
<tr>
<td>Natchitoches Engraved</td>
<td>Emory Punctated-Incised</td>
</tr>
<tr>
<td>Emory Punctated-Incised</td>
<td>Natchitoches Engraved</td>
</tr>
<tr>
<td>Ebarb Incised</td>
<td>Ebarb Incised</td>
</tr>
<tr>
<td>No brushing</td>
<td>Brushing very rare</td>
</tr>
<tr>
<td>Bone temper</td>
<td>Bone and shell temper</td>
</tr>
</tbody>
</table>

The Kinsloe Subcluster

Jones (1968:156-223), analyzing materials from sites (primarily burials) containing 17th and 18th century historic artifacts on the upper middle Sabine River drainage, identified a Kinsloe focus (phase) which he equated to the ethnohistoric Hasinai Nadaco. The Kinsloe focus as identified by Jones is characterized by an undecorated grog-tempered or grog and bone-tempered ware that was named Henderson Plain. Also common in the focus are vessels that would have been classified as Natchitoches Engraved (or Hodges Engraved, based on design elements, shape, etc.), but are primarily grog-tempered. Jones dealt with the problem of whether the wares were Natchitoches (i.e., without bone temper) or Hodges Engraved by referring to a Natchitoches/Hodges Engraved category (Jones 1968:4). Grog-tempered Emory Punctated-Incised and bone-tempered Simms Engraved wares are also considered resident. Bone-tempered "Bullard Brushed" also occurred as a resident utilitarian ware. Although Jones included Taylor Engraved bottles as part of his Kinsloe focus, I am inclined to believe that: (1) they are non-resident and represent trade with the constituent groups (subclusters) within the Cypress Cluster delineated by Thurmond (1985) for the Cypress Creek drainage just to the north, or (2) represent the late historic period remnants of a Titus phase subcluster decimated by the DeSoto expedition. Jones identified Patton Engraved and Womack Engraved as non-resident.

In 1993, I proposed a Nadaco Caddo group related to but differentiated from the Ais Caddo and Adaes Caddo groups:
KINSLOE FOCUS (phase) NADACO?

HENDERSON PLAIN
NATCHITOCHES/HODGES ENGRAVED
EMORY PUNCTATED-INCISED
SIMMS ENGRAVED
BULLARD BRUSHED

Grog temper predominates in most ceramics

Jones suggested his Kinsloe focus could be identified with the Nadaco Hasinai group, and my earlier proposal emulated that belief. In retrospect, I am now convinced that while the archaeological manifestation described by Jones may represent some sort of Caddo group, they were not Hasinai Caddo, and thus probably not the Nadaco. Recent investigations (see below) at the site of Mission San Jose de los Nasonis (established in 1721 for the Nasoni and Nadaco) suggest that the sites described by Jones on the Sabine River and tributaries are more closely related to sites associated with the Adaes and Ais subclusters (see above) and the Gilbert subcluster (see below) than with the Hasinai Caddo groups. As noted below, Patton Engraved is the primary decorated ware found at the site of Mission Nasonis, and bone temper is the rule. Also, Patton Engraved is the dominant decorated ware throughout the area dominated by the ethnohistoric Hasinai. If the sites described by Jones do relate to the Nadaco, then some significant ceramic and technology changes occurred between 1721 and 1778-1779, when, according to Smith (1995), the Nadaco moved to the upper Sabine. In addition, most of the historic artifacts associated with the sites described by Jones predate the Nadaco move to the Sabine.

At this point, I suggest modifying Jones’ hypothesis and my earlier proposal and propose instead a Kinsloe subcluster (with, I believe, identifiable prehistoric and historic phases) with at least one constituent group:

KINSLOE SUBCLUSTER

NADACO CONSTITUENT GROUP

Henderson Plain
Natchitoches/Hodges Engraved
Emory Punctated-Incised
Simms Engraved
Bullard Brushed

Archaeologically, then, the Kinsloe subcluster/constituent group is distinguished from the Ais and Adaes subclusters by grog-tempered Hodges/Natchitoches Engraved and Emory Punctated-Incised and bone-tempered Simms Engraved and “Bullard Brushed.” In general, brushing as a surface treatment is still not common.
The Gilbert Subcluster

Two archaeological components, the Pearson site and the Gilbert site, on the upper reaches of the Sabine River have traditionally been identified as components of the Norteno focus (or phase), which is believed to represent some of the historic Wichita. Bruseth and Perttula (1981:6) have suggested that these components may in fact be Caddo in origin rather than indications of Wichita migration. At this point I am inclined to agree, at least to the extent that the components in question are probably not Wichita in origin.

The suite of ceramics in these components, discussed briefly below, is sufficiently like the suite of ceramics associated with the proposed Kinsloe, Adaes, and Ais subclusters to suggest a relationship. Specifically, the ceramics at the Gilbert site are Womack Engraved, Simms Engraved, Natchitoches Engraved, Emory Punctated-Incised, and Womack Plain. Interestingly enough, the Natchitoches Engraved group is typified by vessels with designs that are not quite like the classic Natchitoches designs. The Natchitoches Engraved ware at Gilbert is overwhelmingly shell-tempered. In all of the wares at Gilbert, shell tempering is the norm, followed closely by bone, and then grog a distant third. Thus, I propose a Gilbert subcluster, with close affinities to the Kinsloe, Adaes, and Ais subclusters:

**GILBERT SUBCLUSTER**

- Womack Plain
- Womack Engraved
- Natchitoches Engraved?
- Emory Punctated-Incised
- Simms Engraved

Brushing rare
Shell tempering is the norm
Bone temper not infrequent
Grog temper rare

At the core of these related subclusters are, with local variations, the ceramic types Natchitoches Engraved and Emory Punctated-Incised and the low occurrence or absence of brushing as a surface treatment. Differences between the subclusters revolve around temper types and the frequencies of Womack wares and Simms Engraved. This Sabine cluster and recognized subclusters differs significantly from the Anderson cluster to the south and the Cypress cluster to the north. This cluster would be composed of the Gilbert, Kinsloe, Adaes, and Ais subclusters and could be viewed as representing an historic period Caddo (?) interaction sphere (phase) along the Sabine River basin.
The Anderson Cluster

The cluster concept was first applied to a series of sites on the upper Angelina and middle Neches River drainages, incorporating the sequent Frankston and Allen phases into a soci-economic model derived from Wyckoff and Baugh's (1980) analysis of the Caddo ethnohistoric data. In the archaeological data, the ceramic types and paste characteristics are very distinctive and strikingly different from those on the Sabine River and Big Cypress Creek. Yet even within this cluster it may be possible to begin to sort out clusters of traits that are analogous to the subcluster/constituent groups (for the protohistoric and historic groups) discovered by Thurmond (1985) on the Cypress.

The vehicle for Story and Creel's (1982) introduction of the cluster concept was the Deshazo site on Bayou Loco in central Nacogdoches County. Using that site as a base for our discussion, it is quite clear that the ceramic inventory is strikingly different from that of the cluster and subclusters discussed above:

**ANDERSON CLUSTER, ca. 1720**

<table>
<thead>
<tr>
<th>DESHAZO</th>
<th>NASONI</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PATTON ENGRAVED</strong></td>
<td><strong>PATTON ENGRAVED</strong></td>
</tr>
<tr>
<td>Grog temper (89%)</td>
<td>Bone temper (90%)</td>
</tr>
<tr>
<td>Brushing (61%)</td>
<td>Brushing (31%)</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>MAYHEW</th>
<th>SPRADLEY</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>PATTON ENGRAVED</strong></td>
<td><strong>PATTON ENGRAVED</strong></td>
</tr>
<tr>
<td>Bone temper (80%)</td>
<td>Grog temper (51%)</td>
</tr>
<tr>
<td>Brushing (64%)</td>
<td>Bone-grog temper (48%)</td>
</tr>
</tbody>
</table>

At Deshazo, Patton Engraved is the primary identifiable decorated ware, brushing occurs on ca. 61% of the sherds from the site, and the wares at the site are overwhelmingly grog-tempered (89%). At the nearby Mayhew site, possibly 20-30 years later than the Deshazo site occupation, Patton Engraved, brushing (64%), and bone temper are the norm. There is at least one Emory Punctated-Incised and one Natchitoches Engraved vessel at the Mayhew site, another indication that it is later than the Deshazo site.

Recently, the archaeological remains of Mission San Jose de los Nasonis have been located. This mission, established in 1721 and abandoned 12 years later, was set in the middle of the area occupied by Nasoni and Nadaco Caddo, Hasinai groups associated with the Hainai, Nacogdoche, Nabedache, and Nechas. A significant surface collection has been amassed by an avocational archaeologist, and a week long excavation was
undertaken by the Laboratory of Anthropology at Stephen F. Austin State University. Initial analysis of the excavated ceramic material is revealing: (1) Patton Engraved is apparently the dominant resident type, (2) brushing occurs on 30% of the sherds, and (3) the tempering agent is bone (90% of the sherds!). Other than the bone temper, the ceramics from this site, the same age as los Adaes and Mission Dolores de los Ais, suggest that the Nasoni can at least be distinguished from the Ais and Adai. Although sharing Patton Engraved as the primary formal type with the Deshazo, Mayhew, and Spradley sites, the differences in temper and percentage of brushing suggests that the Nasonis can be differentiated archaeologically from the Nacogdoche and other Hasinai groups as well.

Solis, in 1767, remarked that “We passed Loco Creek, which was rather deep. Along its beautiful and shady banks there are great numbers of Tejas, Asinais, and Navidachos.” It is not clear whether Solis actually observed three different Hasinai groups on Bayou Loco or was relating facts as he believed them to be. If in fact the three different groups were ensconced on Bayou Loco at the same time, then there must have been some identifying characteristics on which he based his observation. While it is debatable whether the archaeological record would preserve that phenomena, the excavation of two Hasinai (?) sites (Deshazo and Mayhew) on Bayou Loco suggest it might be possible.

Similarly, an historic Caddo burial on Bayou LaNana, presumably near the location of Mission Dolores to the Nacogdoche Caddo, contained, in addition to glass trade beads and Oliva shell beads, a small Patton Engraved bowl and a small Emory Punctated-Incised jar.

Northern Anderson Cluster (Upper Neches)

A series of six Caddo sites on the upper Neches River (see Anderson et al. 1974; Kleinschmidt 1982) suggest the existence of a northern Anderson cluster.1

UPPER NECHES RIVER CLUSTER2

<table>
<thead>
<tr>
<th>Subcluster 1</th>
<th>Subcluster 2</th>
<th>Subcluster 3</th>
</tr>
</thead>
<tbody>
<tr>
<td>Poynor Engraved (45%)</td>
<td>Poynor Engraved (50%)</td>
<td>Poynor Engraved (15%)</td>
</tr>
<tr>
<td>Maydelle Incised (9%)</td>
<td>Maydelle Incised (33%)</td>
<td>Maydelle Incised (14%)</td>
</tr>
<tr>
<td>Bullard Brushed (20%)</td>
<td>Bullard Brushed (3%)</td>
<td>Bullard Brushed (58%)</td>
</tr>
<tr>
<td>Grog temper (98%)</td>
<td>Grog temper (98%)</td>
<td>Grog temper (87%)</td>
</tr>
<tr>
<td>Brushing (30%)</td>
<td>Brushing (30%)</td>
<td>Brushing (42%)</td>
</tr>
</tbody>
</table>
Conclusions

Although this survey of the available data has been somewhat cursory, I believe that it is quite evident that cluster constituent groups can be identified with some confidence, at least within the Southern Caddo region. What remains to be explained is the site cluster phenomena and the source of the regional diversification so evident from the archaeological and ethnohistoric data. Suffice it to say at this point that a combination of historical, local, and regional environmental and macroeconomic factors are probably the primary factors. In particular, the location of main river crossings and the ancient trade routes that utilized them have focused important elements of the region’s settlement pattern since at least the beginning of the Woodland or Early Ceramic period. Further delineation of this interesting phenomena will have to be part of another discussion.

Editor’s notes

*This article was a MS Corbin had provided to Perttula for publication in the late 1990s (the exact date eludes him), but for one reason or another was never finalized or submitted for publication. We have decided to publish the MS now because the topic embraces coming to grips with ways to better understand and categorize Caddo historic archaeology, topics the ETCRG members discussed at some length in the December 2006 meeting. Other than minor editorial revisions to address issues of grammar and spelling, the article before the reader is Corbin’s original MS version.

1. This section of Corbin’s MS was never completed.

2. The Forest Drive and Woldert sites comprise subcluster 1; Halbert and Ferguson sites comprise subcluster 2; and Debro and William Sherman comprise subcluster 3 sites of the Upper Neches River cluster (Anderson et al. 1974).

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