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Wilson W. Crook III

Houston Archaeological Society, dubcrook@kingwoodcable.com

Mark D. Hughston

Brazos Gas Company, mhughston2002@yahoo.com

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The Late Prehistoric of the East Fork of the Trinity River

WILSON W. CROOK, III AND MARK HUGHSTON

*Houston Archeological Society and Brazos Gas Company
Email: dubcrook@kingwoodcable.com*

Over the last 42 years, the authors have studied in detail the sites and archeological remains ascribed to the Late Prehistoric period of the East Fork of the Trinity River and its tributaries. This includes 20 major sites and a larger number of smaller campsites that occur within a 75 km by 15 km north-south corridor from Collin County in the north to northwestern Kaufman County in the south. As part of this study, we have accessed and examined all known extant collections from previous investigations with a combined artifact assemblage of nearly 32,000 specimens. In addition, we obtained access to the unpublished field notes and maps from many previous researchers and combined them with our own field and laboratory observations. The results of this study confirms the conclusion of both Bruseth and Martin and Prikryl that the *Wylie Focus*, as originally proposed by Stephenson, is an outdated concept. A new chronological sequence consisting of a Woodland period followed by two Late Prehistoric period phases is proposed. In detailing the proposed new sequences, extensive information on each major site, site features such as the distinctive rim-and-pit structures, burials, hearths and caches, and the diagnostic artifacts that characterize each cultural phase are provided. We also detail how the Late Prehistoric of the East Fork is a unique culture, similar but yet distinctly different from the surrounding sites including Bird Point Island (41FT201) and Adams Ranch (41NV177) in Freestone and Navarro counties.

Keywords: East Fork; Trinity River; Late Prehistoric; Collin County; Rockwall County

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INTRODUCTION

In May of 2015, we completed over 40 years of research with the publication of our monograph on the Late Prehistoric of the East Fork of the Trinity River *The East Fork Late Prehistoric: A Redefinition of Cultural Concepts Along the East Fork of the Trinity River, North Central Texas*. At the request of the Center for Regional Heritage Research, we have written this paper that summarizes the key findings of our research and includes numerous figures that illustrate the artifacts studied.

It was never our intention to conduct a comprehensive re-evaluation of the Late Prehistoric period (ca. A.D. 700-1600) of the East Fork and its tributaries. When we initiated our research in the early 1970's there had been published excavations at the Hogge Bridge (41COL1), Campbell Hole (41COL10), Branch (41COL9), and Upper Farmersville (41COL34) sites in Collin County, and similar excavations completed at the Upper Rockwall (41RW2), Lower Rockwall (41RW1) and Glen Hill (41RW4) sites in Rockwall County. Moreover, members of the Dallas Archeological Society (DAS) had conducted excavations at all of the above sites

plus at the Randle (41RW10), Raglan (41KF4) and Gilkey Hill (41KF42/41DL406) sites. Lastly, Southern Methodist University (SMU) had agreed to undertake the excavation of the Sister Grove Creek (41COL36) site, the last large site that had previously not been excavated. Most of this previous research had focused on attempting to discover the purpose of the unique rim-and-pit structures present at the larger sites along the East Fork; and while no definitive use had yet to be determined, a range of possible end-uses had been postulated that seemed likely to encompass their usage. As a result, our research intentions were to *fill in the holes* with regard to information about the Late Prehistoric period of the region. This included the investigation of a few of the area's smaller sites in Collin County, namely the Enloe (41COL65), 380 Bridge (41COL66), and Mantooth (41COL167) sites, plus conduct a salvage excavation of some of the undisturbed parts of the Upper Farmersville site.

This would have likely signaled the end of our involvement in the region had it not been for the publication of Bruseth and Martin's work at Bird Point Island (41FT201) and Adams Ranch (41NV177), over

100 km to the south of the East Fork sites. At these two sites along Chambers and Richland Creeks, respectively, Bruseth and Martin [1] found rim-and-pit structures that appeared to be similar to those described from the East Fork. Their comprehensive investigation discovered that the pit structures were not an exclusive Late Prehistoric period feature, but instead had been constructed in the Late Archaic period (ca. A.D. 200-700), and then more or less continuously used throughout the Late Prehistoric [1]. They also discovered that pit use changed throughout time, first from a cemetery in the Late Archaic, to a roasting area, then to a trash pit during the Late Prehistoric period [1]. These conclusions were supported by their excavation evidence, and nothing more would have come of it had they then extrapolated their results to the Late Prehistoric of the East Fork. At the time, the East Fork Late Prehistoric was still characterized under the name, *Wylie Focus*, as originally described by R. L. Stephenson in 1952. Later researchers had wondered if the term *Wylie Focus* might be too broad and simplistic a term, that it might in fact encompass several cultures [2, 3]. However, in 1988, Martin and Bruseth not only discredited the use of the term *Wylie Focus* based on their Richland/Chambers Creek findings, but then failed to offer an alternative explanation for the character of the archeology on the East Fork [4]. Prikrly [5] attempted to resolve the issue in his analysis of the archeological constructs for North Central Texas, but his study area focused more closely upon the Elm and West Forks of the Trinity River and very little on the East Fork. The lack of a cultural construct for the East Fork disturbed many of the original researchers of the Late Prehistoric of the East Fork [6] but with many of the sites now under the waters of Lake Lavon and Lake Ray Hubbard, coupled with the age and/or passing of most of the area's original researchers, no effort was made to rehabilitate the East Fork's Late Prehistoric period.

As a result, the authors decided in 2003 to completely re-evaluate the entire Late Prehistoric occupation along the East Fork of the Trinity River and its tributaries. This project has led us on a decade-plus search through the collections at the Texas Archeological Research Laboratory (TARL) in Austin, those present at SMU in Dallas, and the R. K. Harris collection currently curated at the Museum Support Center of the Smithsonian Institution in Washington, D.C. We discovered that many of R. L. Stephenson and R. K. Harris' field notes from the 1940's and 1950's were still available for study that also included unpublished data and observations. As part of this study, we additionally let it be known that we would like the opportunity to study and record any artifact collections that could be verified as coming from sites along the East Fork. This led us to the discovery of the Rex Housewright-Lester Wilson-Bobby Vance collection. These three Dallas Archeological Society members had made a pact to keep their East

Fork collections together for future research, so the Housewright collection passed upon his death to Lester Wilson, who passed the collection on his death to Bobby Vance [7]. With the passing of Mr. Vance, the entire collection plus all its research maps and notes, were purchased by authors in order to keep this valuable set of data intact. The study of these materials and their accompanying field notes and maps has been invaluable to our research on the East Fork Late Prehistoric.

Lastly, we approached the Heard Natural Science Museum in McKinney, Texas about locating all of the excavation materials (artifacts, maps, notes) from our work in the 1970's. Amazingly, most of these were preserved in the museum's basement storage rooms and the Heard Museum graciously allowed us to take the materials out on loan for study. Of particular significance were carbon matter collected and preserved from the Upper Farmersville site that allowed splits to be made and radiocarbon dates obtained. We were also able to study the Puebloan artifacts from the Branch #2 (41COL259) site in Collin County [8] and perform X-Ray Fluorescence (XRF) source analysis on both the obsidian and turquoise artifacts. We also made copies of our field excavation notes that contained detailed stratigraphic information on the Upper Farmersville, Branch and Enloe sites.

Collectively, all of the above materials comprise around 32,000 artifacts. In addition to East Fork materials, we made a concerted effort to study known Late Prehistoric period artifact collections from the areas to the west (Elm and West Forks of the Trinity River), to the east (Caddo material from East Texas), and to the south (Ellis County and Chambers and Richland Creeks) of the East Fork area. This involved studies of collections at both TARL and at SMU, the latter including an extensive review and study of all the preserved material excavated by Bruseth and Martin from the Bird Point Island and Adams Ranch sites.

Our research also involved revisiting as many of the East Fork sites as possible for the purpose of photographing major features such as surviving rim-and-pit structures, hearths, etc. This was greatly facilitated by the recent extended drought that significantly affected the lakes along the East Fork of the Trinity River, with both Lake Lavon (Collin County) and Lake Ray Hubbard (Rockwall and Dallas Counties) falling well below conservation levels. As a result, many of the Late Prehistoric archeological sites that had been inundated by the lakes in the 1960's and 1970's have been re-exposed. This includes the Sister Grove Creek and Branch sites in Collin County (Lake Lavon) and the Upper Rockwall site in Rockwall County (Lake Ray Hubbard). Visits to these sites by the authors has shown that 35-40 years of wave action has severely deflated the stratigraphy, leaving a large number of artifacts, notably large ground stone artifacts, exposed on the surface. As a result, a significant amount of new information has been added, and is summarized below.

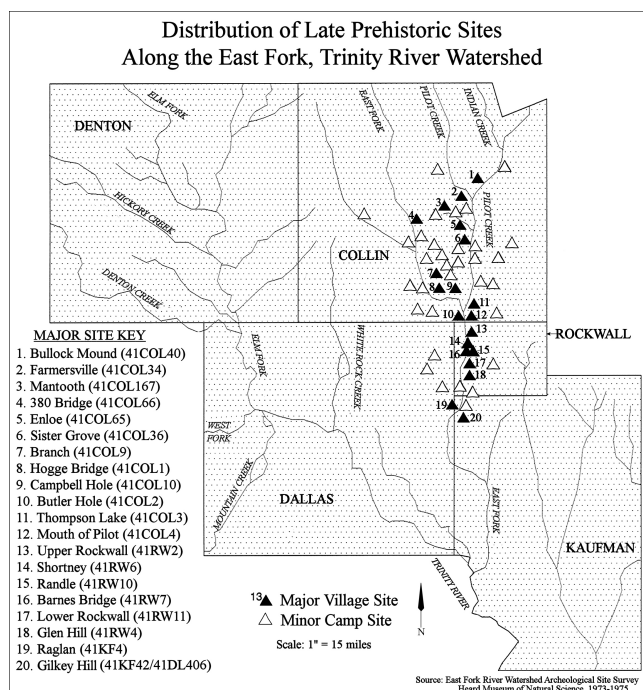


FIGURE 1. Distribution of the Late Prehistoric sites along the East Fork of the Trinity and its tributaries. Major sites are identified by solid black triangles and identified by name; minor seasonal campsites are shown as unfilled triangles. (Figure by Lance Trask)

REGIONAL SETTING

Numerous sites of the Late Prehistoric period occur along the East Fork of the Trinity and its tributaries in a roughly north-south corridor from Collin County in the north to northwestern Kaufman County, some 70 km to the south. The study area encompasses the eastern two-thirds of Collin County, virtually all of Rockwall County, northwestern Kaufman County and extreme northeastern Dallas County. In all, the study area covers approximately 2,150 square miles. Over 50 sites have been identified which share similar cultural materials (Figure 1). Of these, we have arbitrarily designated 20 as *major sites* based on their aerial size (>0.5Ha) and number of artifacts recovered (>100) with the others being smaller, seasonal campsites (see Figure 1; unfilled triangles). The observed artifact assemblages at these sites are homogeneous and consistent with the Late Prehistoric period along the East Fork; as initially characterized by Stephenson [9, 10], then subsequently refined by Lynott [11, 12], Crook [13, 14, 15] and Crook and Hughston [16, 17]. Age of the Late Prehistoric along the East Fork has been radiocarbon dated (calibrated) from ca. A.D. 700 to A.D. 1600 [18, 19, 11, 20, 21, 22].

Sites along the East Fork and its tributaries differ in terms of cultural material from Late Prehistoric sites to the west along the Elm Fork of the Trinity, to the east in the Sulphur River drainage, as well as farther

south along the main branch of the Trinity (Figure 2). Sites along the Elm Fork have a significantly higher percentage of triangular arrow points (Fresno, Harrell, Washita) and a larger percentage of shell-tempered ceramics, both of which are more characteristic of the Henrietta phase of the southern Great Plains [23, 5]. Sites east of the East Fork are characterized by a higher percentage of Caddo traits [24]. Likewise, sites to the south along Richland Creek, such as Bird Point Island (41FT201) and Adams Ranch (41NV177), are characterized by a number of traits which differ from those which characterize the East Fork Late Prehistoric. Chief among these are (1) different shaped house structures; (2) extensive use of *Psoralea*, the Prairie Turnip, completely absent along the East Fork; (3) the virtual absence of any shell-tempered ceramics which makes up nearly 50 percent of East Fork ceramics; (4) the occurrence of Hayes and Cuney points and the lack of Catahoula and Fresno points; (5) the occurrence of different utilitarian tools such as the Bristol biface and the complete absence of sub-triangular scrapers such as the *East Fork Biface* [25]; and (6) the absence of tools made from worked mussel shell. Moreover, while both the Richland Creek and the larger East Fork sites have a distinctive rim-and-pit structure (the so-called *Wylie Pits*), their use appears to be very different. Bruseth and Martin [1] found that pit structures at Bird Point Island and Adams Ranch were created during Archaic times and changed functions from a cemetery in the Late Archaic, to a roasting pit, then to trash pits in the Late Prehistoric. The Archaic burials always occur in the center of the pits, and not in the rims. The rim-and-pit structures along the East Fork all date to the Late Prehistoric and demonstrate consistent usage as roasting pits with the rims being reserved for burial of high status individuals [11, 16, 21]. Thus, while having a culture that shares traits with their surrounding neighbors, the Late Prehistoric inhabitants of the East Fork appear to have possessed a unique set of cultural traits that set them apart.

SYNTHESIS

Stephenson used the Midwestern Taxonomic System and proposed a culture-historic construct along the East Fork of the Trinity River and its tributaries that, when taken as a constellation of traits, defined the *Wylie Focus* [10]. Key elements of this cultural construct included:

- Large sites containing a single circular pit structure with a built-up rim
- Pottery, while fairly abundant, seemed to consist largely of trade material; no indigenous types appear to be present
- Burials are all flexed
- No complex of burial furniture occurs
- Burials are both single and multiple interments in poorly defined burial pits

Location of the East Fork Late Prehistoric
Relative to Other Late Prehistoric Cultures
in North Central and East Texas

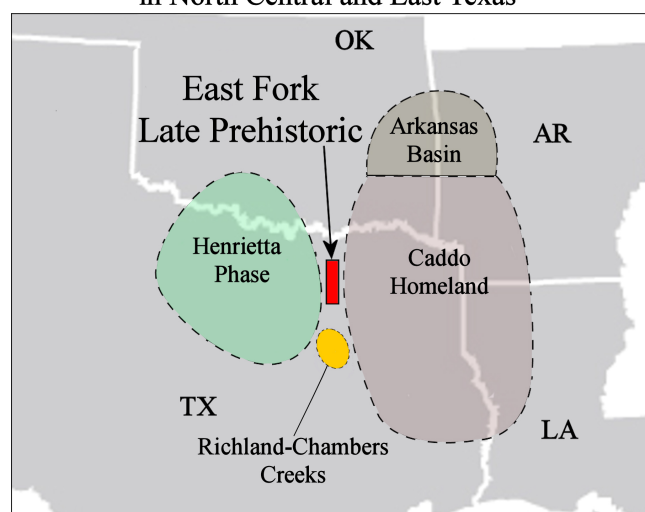


FIGURE 2. Location of East Fork Late Prehistoric relative to other Late Prehistoric cultures in North-Central and East Texas. Its location in between the traditional Caddo Homeland and the Southern Great Plains accounts for it being a mixture of the two. (Figure by Lance Trask)

- Artifacts of all types are consistently similar within a site and reasonably distinctive in total assemblage between sites

Stephenson only looked at three sites along the East Fork: Hogge Bridge, Campbell Hole and Branch; and of these three, Campbell Hole and Branch received only a cursory excavation. All other researchers who have followed Stephenson have typically worked on only one, or at most two sites; then cited Stephenson without reviewing his work to see if it was correct.

Ross [2] was the first to question the validity of the *Wylie Focus* as a single cultural construct based on his observations at both the Upper Rockwall and Glen Hill sites. At Lower Rockwall and Sister Grove Creek, Lorrain and Hoffrichter [3] and subsequently Lynott [11] also believed the *Wylie Focus* encompassed more than a single culture. In his doctoral dissertation, Lynott [26] proposed that the *Wylie Focus* be divided into an underlying Archaic phase that evolved into an Early Neo-American and a Late Neo-American phase; the latter two characterized by distinct and separate arrow point and ceramic assemblages.

Bruseth and Martin [1] excavated in superb detail two large, multi-component sites 100 km south the East Fork along Richland and Chambers Creeks. They found that the Bird Point Island (41FT201) and Adams Ranch (41NV177) sites had their beginning in the Late Archaic that continued into the Late Prehistoric. As the two sites had pit structures of apparent similar nature to those along the East Fork, Bruseth and Martin [1] assumed a cultural affinity between the two areas and

as such, stated that the *Wylie Focus* was an outdated construct and should be abandoned [4]. No detailed study of the East Fork material was included in this analysis and no new construct was offered for the East Fork as a replacement to the *Wylie Focus*.

Prikryl [5] studied the prehistory of the Elm Fork of the Trinity River and as part of this work, tangentially looked at the East Fork. He proposed a Late Archaic phase followed by Late Prehistoric I and Late Prehistoric II periods for all of North Central Texas [5]. An approximate age of A.D. 750-1250 was proposed for the Late Prehistoric I period and ca. A.D. 1250-1700 for Late Prehistoric II. Both were characterized by distinct arrow point assemblages; Late Prehistoric I with Alba, Catahoula, Scallorn and Steiner; Late Prehistoric II by Maud, Fresno, Perdiz, Washita and Harrell. No specific cultural construct was proposed for the East Fork.

We have now concluded the most extensive review of the Late Prehistoric period of the East Fork. This included the excavation and analysis of eight major *Wylie Focus* occupations (Bullock Mound (41COL40), Upper Farmersville, Mantooth, 380 Bridge, Enloe, Sister Grove Creek, Branch and Gilkey Hill), and the study of collections made by previous researchers from the remaining 12 major sites as well as from 38 smaller campsites in Collin and Rockwall counties. As mentioned above, this study enlisted nearly 32,000 individual artifacts. Moreover, we have had access to a large number of unpublished field notes and maps including Stephenson's from the Branch site, Housewright and Wilson's from Butler Hole (41COL2), Wilson and Vance's from the Shortney (41RW6), Randle and Barnes Bridge (41RW7) sites, and Harris' from Upper Farmersville, Thompson Lake (41COL3), Mouth of Pilot (41COL4) and Gilkey Hill. As a result, we are in a unique position to provide the first comprehensive synthesis of cultural constructs for the East Fork of the Trinity River.

PRE-CERAMIC AND WOODLAND PERIODS OF THE EAST FORK

At the base of most of the larger sites along the East Fork is a pre-ceramic phase that has affinities with similar cultures in Northeast Texas. Stratigraphically, the pre-ceramic occupation occurs at the base of a local gray-black topsoil (C horizon), that lies immediately above a largely sterile yellow sandy clay. The pre-ceramic horizon is characterized by medium to large (>50 mm) dart points (Gary, Ellis, Yarbrough, Edgewood), large leaf-shaped bifaces, and a wide range of scraping tools (Figures 3 and 4). This culture is very different from the Archaic cultures present along the Elm Fork and main branch of the Trinity River [27, 28]. While not abundant along the East Fork, the Trinity Archaic is represented in Collin County at sites like McGuire (41COL26) [29], Frognot (41COL165) [30] and Upper Farmersville North



FIGURE 3. Gary dart points from various East Fork sites. Top Row: Butler Hole, Upper Farmersville, Sister Grove Creek, Gilkey Hill (2), Sister Grove Creek. Middle Row: Thompson Lake, Gilkey Hill, Branch, Sister Grove Creek (2), Gilkey Hill. Bottom Row: Upper Farmersville, Gilkey Hill, Upper Farmersville, Mantooth, Branch (2). (Photo by Laura Nightengale)



FIGURE 4. Non-Gary dart points from various East Fork sites. Top Row: Upper Farmersville, Gilkey Hill, Upper Farmersville (2). Middle Row: Gilkey Hill, Butler Hole, Mouth of Pilot (2), Upper Farmersville. Bottom Row: Barnes Bridge, Butler Hole, Upper Farmersville (2), Shortney (2). (Photo by Laura Nightengale)

(41COL166) [31]. In classic Trinity Archaic sites, dart points are typically constructed from >50 percent chert and point types such as Carrollton, Trinity, Elam, Dallas, Bulverde, Andice/Calf Creek, etc. predominate. Gary points are present, but in smaller numbers until the very Late Archaic. Square bifaces or knives are in near equal numbers to leaf-shaped bifaces. Other artifacts not found in the East Fork pre-ceramic sites include double-bitted Carrollton axes [32], Clear Fork gouges, net sinkers, and fired clay balls. McGuire, Frognot, Upper Farmersville North, and Enloe Road (41COL175) all have these diagnostic Trinity Archaic artifacts. Moreover, the Trinity Archaic sites that are present along the East Fork typically occur by themselves with no later occupation superimposed. Additionally, they are found on the first major terrace above the East Fork. This is usually 12-18 meters above the small topographic highs on the floodplain where the Woodland and Late Prehistoric period sites are found.

The Woodland Period that occurs at most East Fork sites is more similar to those artifact assemblages found in similar period sites in East Texas and along the Red River [33, 34]. Gary dart points predominate, and local quartzite comprises 80+ percent of all the lithic artifacts. Based on their apparent lack of antecedents along the Trinity, the people of this Woodland culture appear to have migrated into the area sometime after A. D. 0. Exactly when is uncertain but a tentative date of approximately A.D. 200 is postulated but it could be as early as ca. 500 B.C.

Ceramics first appear in this Woodland period and are almost exclusively sandy paste-, grog-tempered

plain wares, which generally fit within the classification of Williams Plain. This culture appears to have developed in place and is similar to the Fourche Maline culture in Northeast Texas [35, 36, 37, 34, 38, 39]. The only significant difference between this early ceramic culture and the pre-ceramic culture below it is a slight decrease in size of the dart points and the addition of Williams Plain pottery.

Ceramics are known to occur in East/Southeast Texas as early as ca. 500 B.C. [40]. While local ceramic manufacture began in the Woodland period, it is not until ca. A.D. 1200-1300 that ceramics become a significant part of the material culture of all aboriginal groups in Texas [40]. Three major Woodland period traditions have been identified in East Texas: Fourche Maline, Mill Creek and Mossy Grove [41, 42, 43]. All are more or less contemporaneous, and range in age from ca. 500 B.C. to ca. 800 A.D. [41]. Along the East Fork, the Woodland tradition more closely mirrors that of the Fourche Maline, but is not an exact match. In Texas, the Fourche Maline extends from just south of the Red River and its tributary the Sulphur [34]. The Fourche Maline is generally characterized by Gary dart points, small one-hand manos (for seed grinding), boatstones, double-bitted axes, stone pipes and plain ware ceramic *flower pot-shaped* bowls and jars with a variety of tempers (grog, crushed bone) [34]. Williams Plain is the predominant ceramic type, representing as much as 92 percent of the ceramics at some sites [44, 34]. Vessel thickness is highly variable but averages around 12 mm in walls; bases are overwhelmingly flat, thick

and circular in outline. With the exception of the lack of double-bitted axes, this is precisely what is present below the Late Prehistoric period deposits in sites along the East Fork and its tributaries.

Two radiocarbon dates from the East Fork are available from this period; one from a burial at Lower Rockwall (Beta-393414), and the other from a burial at Glen Hill (Beta-393415). Both date to around the same time frame, A.D. 710 +/- 30 and A.D. 730 +/- 30, respectively. The Glen Hill date is significant because a small sherd of typical Williams Plain pottery was found associated with the skeletal remains and was ascertained to have been part of the original burial fill (Lester L. Wilson, personal communication, 1973). As such, it denotes that ceramics were present along the East Fork as early as ca. A.D. 700.

WYLIE PHASE (LATE PREHISTORIC I, A.D. 800-1250)

Immediately above the Woodland occupation is a similar cultural deposit that is characterized by the introduction of the bow and arrow. Stratigraphically, this occupation begins at a depth of 10-20 cm below surface at most East Fork sites and extends to a depth of 30-40 cm or more. Arrow point types in this level consist of Alba, Catahoula, and Scallorn types, with an occasional Steiner (Figures 5, 6 and 7). Excavation at several East Fork sites has shown that arrow points of these types coexist with dart points; the latter consisting almost exclusively small to medium-sized Gary points (30-50 mm) with smaller numbers of Kent, Godley and Dawson points. It is uncertain how long this coexistence of the atlatl with bow and arrow persists but based on stratigraphic finds from undisturbed lenses at several sites, we would estimate that the atlatl and dart point are maintained as part of the dual hunting weapon system well past ca. A.D. 1000 and possibly as late as ca. A.D. 1100+. Utilitarian lithics remain largely unchanged from the Woodland period with the possible addition of the specific woodworking scraping tool we have named the *East Fork Biface* (Figure 8) [25]. Williams Plain ceramics continue as a major pottery type but there is an addition of Sanders phase ceramics from East Texas (Sanders Plain, Sanders Engraved, Monkstown Fingernail Impressed and Canton Incised) with time (Figure 9). Moreover, there is an increase in the use of grog along with sandy-paste in the locally-produced plain ware. In the Caddo region, the high frequency of grog as a ceramic temper is seen as a specific attempt to slow the oxidation process during firing [42, 43]. This allows the vessel to be fired for longer periods of time, thus producing a harder ceramic. Darker-colored ceramic vessels are evidence of firing in low oxygen, reducing environments; tan, brown to orange-colored vessels are indicative of firing in an oxidizing environment.



FIGURE 5. Alba arrow points from various East Fork sites. Top Row: Upper Farmersville (3), Sister Grove Creek, Upper Farmersville. Middle Row: Branch, Upper Farmersville (2), Thompson Lake, Mouth of Pilot. Bottom Row: Hogge Bridge, Thompson Lake, Upper Rockwall, Thompson Lake, Upper Farmersville. (Photo by Laura Nightengale)

Whitetail deer and turtle, supplemented by other small game, shellfish, nuts and wild plants constituted the diet of the aboriginal inhabitants for the East Fork Late Prehistoric period. Our analysis of ground stone tools show that the overwhelming majority of manos (86 percent) present were small, one-hand grinding stones used in a rotary grinding motion (Figure 10) [45]. Ethnographic studies have repeatedly shown that sites where the majority of manos have a grinding surface area of less than 150 cm² (average for the East Fork is approximately 125 cm²) have a very low dependence on maize as a food source [46, 47]. Supporting the observation that the manos were used for items other than grain, several were found to contain high levels of iron (Figure 11) and manganese (Figure 12) pigment stains.

Forensic anthropological studies on East Fork Late Prehistoric period remains have shown that the population in general was impacted by dental hypoplasia [48, 11]. Widespread dental hypoplasia points to systemic nutritional deficiencies since childhood. Around 20 percent of the population also suffered from some form of hematologic disorder that manifested itself in spongy or porotic hyperostosis in the cranial bones. Spongy hyperostosis can be caused by a number of hematologic disorders, including congenital anemia, iron deficiency anemias, congenital heart disease, and polycythemia vera in childhood [49]. The similarity in health and nutrition across the district is indicative of either a shared (thus relatively small) common gene pool and/or individuals from different sites being impacted by the same environmental and diet conditions. The average lifespan of the Caddo in East Texas has

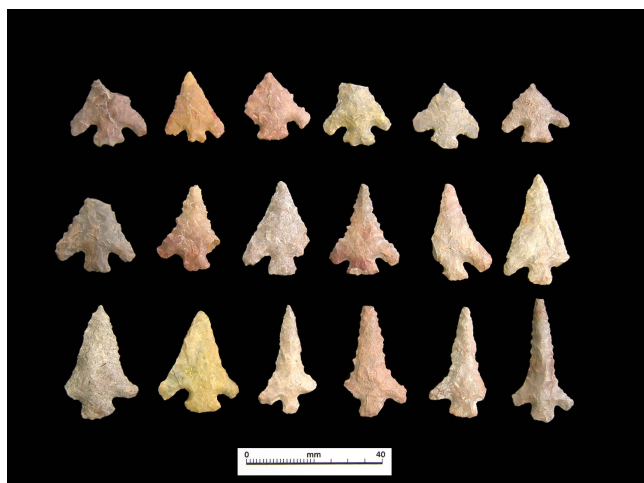


FIGURE 6. Catahoula arrow points from various East Fork sites. Top Row: Branch (3), Upper Farmersville, Hogge Bridge, Mantooth. Middle Row: Lower Rockwall, Upper Farmersville (3), Lower Rockwall, Gilkey Hill. Bottom Row: Branch, Upper Farmersville, Branch, Hogge Bridge, Upper Farmersville (2). (Photo by Laura Nightengale)



FIGURE 7. Scallorn arrow points from various East Fork sites. Top Row: Thompson Lake, Upper Farmersville (2), Branch (2), Gilkey Hill. Middle Row: Upper Farmersville, Mantooth, Hogge Bridge, Upper Rockwall, Lower Rockwall (2). Bottom Row: Thompson Lake, Mantooth, Upper Rockwall, Sister Grove Creek, Upper Farmersville, Branch. (Photo by Laura Nightengale)

been estimated to be around 40 years [50]; a similar lifespan is seen in East Fork individuals.

This occupation, which marks the true beginning of the Late Prehistoric period, appears to have developed in place as there is a continuous progression from the Late Woodland occupation into this phase. However, the exact mechanism that spurred the emergence of a Late Prehistoric culture along the East Fork remains uncertain. Regardless, the beginning of the Late Prehistoric period along the East Fork marks the beginning of an expansion in population with larger, more permanently occupied sites. In most East Fork Late sites, the initial Late Prehistoric phase is the major occupation at the site, accounting for approximately 80 percent of the total Late Prehistoric period artifacts. This observation is further supported by the largest cluster of radiocarbon dates that frame this period, including one from Hogge Bridge (A.D. 1000 +/- 70), one from Upper Rockwall (A.D. 1020 +/- 90), one from Branch (A.D. 1025-1165), and six from Sister Grove Creek (A.D. 950-1160). Moreover, three of the dates from Sister Grove Creek (TX-2030, SMU-233, and SMU-239) effectively date Catahoula and Scallorn points, two of the diagnostic lithic artifacts, to this period (A.D. 1160 +/- 60) [11].

More importantly, radiocarbon dates from hearths at or near the base of the rim-and-pit structures at Sister Grove Creek (Feature 8 - TX-2037; Feature 10 - TX-2038), Hogge Bridge (TX-1928) and Upper Rockwall (Stratum V - TX-315) all date the first use of the structures to around A.D. 950-1000. It is uncertain what motivated the inhabitants of the East Fork to construct these specialized features as they



FIGURE 8. East Fork Bifaces from various East Fork sites. Top Row: Sister Grove Creek, Upper Farmersville, Branch, Upper Farmersville, Sister Grove Creek. Bottom Row: Upper Farmersville, Enloe, Upper Farmersville (2), Sister Grove Creek. (Photo by Laura Nightengale)

were apparently not present before this date. As was originally proposed by Lynott [11] and confirmed by the authors at Upper Farmersville and Enloe, the rim-and-pit structures present in the largest sites along the East Fork appear to have served as special ceremonial centers, primarily for the function of roasting and feasting. Their central ceremonial place within East Fork Late Prehistoric society is further underscored by the presence of burials within the pit rims and occasionally within the pit itself. Given the fact that many such burials are accompanied by high value prestige items, such as Caddo pottery vessels,



FIGURE 9. Caddo Engraved Ceramics from East Fork sites. Top Row L-to-R: Poyner Engraved - Mantooth site; Holly Fine Engraved - Branch site. Bottom Row L-to-R: Sanders Engraved - Upper Rockwall; Sanders Engraved - Upper Farmersville. (Photo by Laura Nightengale)

shell beads, gorgets, etc., burials within the rim-and-pit structures likely represent honored or high status individuals [11, 16, 17]. Examples of the rim-and-pit structures at the Butler Hole and Sister Grove Creek sites are shown in Figures 13 and 14.

The expansion in population also saw the construction of more permanent houses as evidenced by the ovoid structure found at the Butler Hole site [51]. Similar well-used living floors were found at Campbell Hole [10], Upper Farmersville [29], and Upper Rockwall [52].

A total of 72 burials encompassing 95 individuals have been found in Late Prehistoric sites along the East Fork with the majority of these burials dating from the initial phase of the Late Prehistoric period. Sixty-three of the burials are single interments; the remaining nine are multiple burials containing anywhere from two to seven individuals. Four distinct types of burials have been identified including (1) flexed burials with or without attendant grave goods, (2) unflexed burials, (3) cremation interments, and (4) disarticulated burials showing no orientation. The latter almost always show signs of violent death (decapitation). Flexed burials are the most common burial type with nearly two-thirds of all known East Fork interments having tightly flexed bodies. Orientation is quite variable as burials have been found facing all directions of the compass.

Contrary to Stephenson's initial observations at



FIGURE 10. Two one-hand manos from the Upper Farmersville site, Collin County, Texas. The mano on the left is made from a sandy limestone; the mano on the right is from sandstone. (Photo by Laura Nightengale)



FIGURE 11. Small, circular one-hand mano from the Branch site, Collin County, Texas showing prominent red staining on the grinding surface. XRF analysis indicates the red material is iron oxide (red ochre).

Hogge Bridge, burials along the East Fork are not totally devoid of associated grave goods. Our study of the 72 known burials from 11 sites indicates that 31 (43 percent) contain some form of grave furniture item. Examples of some of the high value prestige goods found in East Fork interments are shown in Figures 15, 16 and 17.

Lynott [11] speculated that the presence of females buried in the rim-and-pit structures at Upper Rockwall, Lower Rockwall and Sister Grove Creek were perhaps individuals that had been ceremonially sacrificed. Our analysis of all the burials from the East Fork district shows that some 34 individuals were buried either in the pit rim or within a pit structure. Of these, seven were identified as being female, four were males, three were



FIGURE 12. Small, circular one-hand mano from the Sister Grove Creek site, Collin County, Texas showing prominent black staining on the grinding surface. XRF analysis indicates the black material is manganese oxide.



FIGURE 14. Mark Hughston standing in the center of the rim-and-pit structure at the Sister Grove Creek site, Collin County, Texas. Note how the wave action of Lake Lavon over the last 40 years has denuded the northern rim of the structure.



FIGURE 13. View of the Butler Hole rim-and-pit structure in the early 1940's. R. K. "King" Harris is standing on the far rim and Lester L. Wilson stands within the pit's interior. (Photo by Lester L. Wilson)

juveniles, and 20 were adults of undetermined sex. Thus while ritual female sacrifice is an interesting hypothesis and remains a possibility, it cannot be verified by the results of our study.

Several internments in the pit rims as Upper Farmersville and at Lower Rockwall contain one or more individuals that have been decapitated. In the two such internments at Upper Farmersville, all nine individuals were decapitated, then haphazardly thrown into a burial pit. The single individual buried in a similar manner at Lower Rockwall also had three dart points lodged in the body, two in the legs and one lodged in the spine [53]. Brown and Dye [54] note that severed trophy heads played a prominent role in Mississippian culture and art. Harris [55] found a pit of human skulls at the Sam Kaufman site (41RR16) in Red River County less than 150 km to the east.

While decapitation itself does not necessarily indicate a violent death, the lack of burial orientation, which is extremely rare along the East Fork, appears to support the hypothesis that these individuals were outsiders; either captured in warfare or as territorial poachers, and were subsequently executed/sacrificed.

During the Late Prehistoric period there is a significant increase in the acquisition of prestige items including shell, gorgets, polished stone and Puebloan items. A complete Arboles Black-on-White stirrup vessel from Lower Rockwall (Lorrain and Hoffrichter 1968) and Chupadero Black-on-White sherds from the Branch site [56] in particular mark the beginning of these acquisitions in the ca. A.D. 900-1050 timeframe. The influx of Caddo ceramics from the Sanders phase to the east also shows exchange linkages. Acquisition of exotic prestige goods that clearly originate from outside the East Fork indicates the establishment of, and/or the expansion of a network of contacts both to the east and to the west of the East Fork.

Lynott [26] and Prikryl [5] defined this initial Late Prehistoric occupational period as either *Neo-American Early* or *Late Prehistoric I* and framed it temporally between ca. A.D. 750 and 1250. Many characteristics of this culture, including the presence of ceramics, the presence of arrow points, and the presence and extensive use of the rim-and-pit structures, were used by Stephenson to originally describe the *Wylie Focus*. Thus while the term *Wylie Focus* no longer has any meaning as it was originally constructed, we have retained the original name for characterizing the initial Late Prehistoric period along the East Fork of the Trinity River as the *Wylie Phase*.

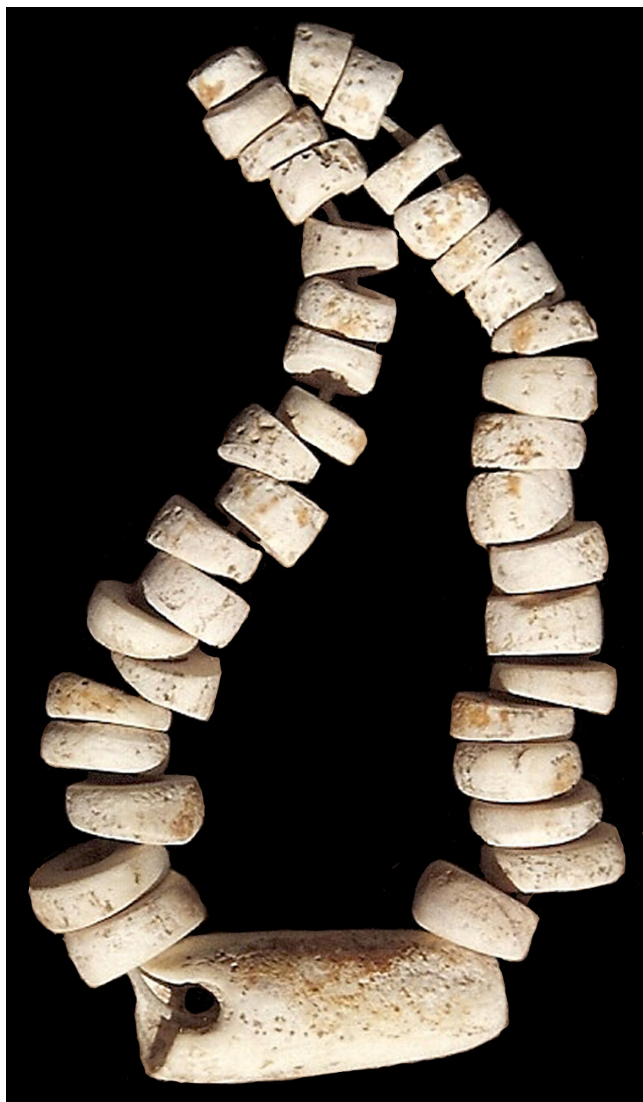


FIGURE 15. Shell beads from a juvenile burial at the Lower Rockwall site. (Photo by Lance Trask)

FARMERSVILLE PHASE (LATE PREHISTORIC II, A.D. 1250-1600)

Lastly, atop the first Late Prehistoric occupation is a second Late Prehistoric culture. This phase is characterized by a pure arrow point and ceramic occupation; dart points are completely absent by this time. Arrow point types consist of Perdiz coupled with Plains types including Fresno, Washita and Harrell (Figures 18, 19 and 20). Other lithic artifacts that characterize this period include small, thumbnail end-scrapers and finely-made flake drills. There is a slight increase in the use of chert, primarily for arrow points and finely-made drills; but the increase is very minor compared to that seen in Late Prehistoric II period sites along the Elm Fork [5]. Shell-tempered ceramics (Nocona Plain) largely replace sandy paste, grog-tempered pottery (Figure 21). In addition, characteristic East Texas Caddo ceramics are present



FIGURE 16. Composite photo of engraved slate gorget from the Upper Rockwall site with obverse (bottom) and reverse (top) faces. (Photo by Lance Trask)

in small amounts (Maydelle Incised, Poynor Engraved, Killough Pinched, etc.) (Figure 22). This occupation is relatively thin, typically found on the surface and to a depth of no more than 10-15 cm. Because of its relatively thin archeological expression, this last phase is not present at every East Fork site, but is particularly well represented at Upper Farmersville, Randle, Lower Rockwall, and Glen Hill with possible additional occurrences at Enloe, Sister Grove Creek, Branch, and Raglan.

Diet of the aboriginal inhabitants along the East Fork remained centered on whitetail deer and turtle, supplemented by other small game, shellfish, nuts and wild plants. No change in grinding stone size was observed, and as such, the use of maize as a food source is believed to have remained minimal. In the Caddo homeland to the east, maize becomes more dominant within the diet only after ca. A.D. 1300 [57]. In small parts of the Caddo settlement especially along the Upper Sulphur River, maize was never an important element of the diet [58, 38].

A pure maize diet is deficient in protein and often leads to parasitic and dental infection [59, 60, 61]. Studies on skeletal remains have shown that the frequency of dental caries in Northeast Texas Caddo sites indicates that maize was an important component in the diet in all the region except that of the Blackland Prairie biotic province [62, 57, 50]. In this area, maize was present but was not as important to the diet as meat, starchy annuals and other wild plants [58]. Flotation analyses specifically looking for maize were conducted at the Sister Grove Creek site [11] and the

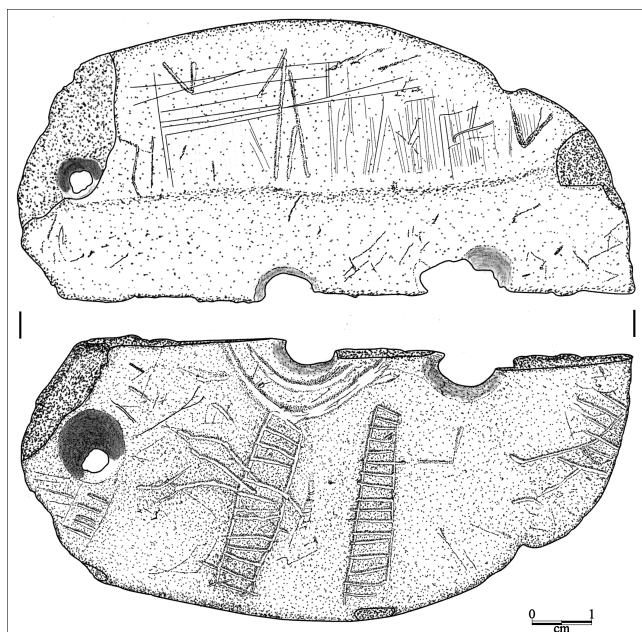


FIGURE 17. Line drawing of engraved slate gorget from the Upper Rockwall site, Rockwall County, Texas with obverse (Bottom) and reverse (top) faces. The stippled line on the reverse engraved face is a distinct ridge. (Illustration by Lance Trask)



FIGURE 18. Fresno arrow points from various East Fork sites. Top Row: Upper Farmersville (2), Branch (2), Upper Rockwall, Branch. Bottom Row: Branch, Upper Farmersville (2), Sister Grove Creek, Upper Farmersville (2). (Photo by Laura Nightengale)

Upper Farmersville site [17]; both without success. The only verified evidence of maize from any East Fork Late Prehistoric site was a single burned kernel recovered from a hearth at the Hogge Bridge site (R. K. Harris, personal communication, 1974). Based on the size of the grinding surface area of manos from the district, the relative lack of the number of grinding stones, and the carbon isotope data from the cranial fragments from Branch site, it is doubtful that maize was ever a significant component of the diet along the East Fork [22].

One addition to the diet during this second phase



FIGURE 19. Washita arrow points from various East Fork sites. L-to-R: Gilkey Hill, Mantooth, Upper Farmersville (2), Mantooth, Upper Farmersville (2). (Photo by Laura Nightengale)



FIGURE 20. Perdiz arrow points from various East Fork sites. Top Row: Upper Farmersville, Mantooth, Gilkey Hill, Hogge Bridge, Mouth of Pilot, Lower Rockwall. Bottom Row: Thompson Lake, Glen Hill, Lower Rockwall, Hogge Bridge, Branch, Gilkey Hill. (Photo by Laura Nightengale)

of Late Prehistoric occupation was likely bison. As demonstrated by Lohse and colleagues [63], bison were more abundant in the Southern Great Plains of Texas in a 120-year window between ca. A.D. 1300-1420. The Caddo are known to have participated in winter communal hunts for bison [64]. The presence of bison bone in East Fork sites suggests the aboriginal inhabitants of the area made similar seasonal hunting forays to the west (Figure 23). Winter would have been the best time for such hunting trips as the bison would have maximum weight and fat and their coats (robes) would have been at peak condition.

The presence of Caddo ceramics, exotic lithic material from the Ouachita Mountains in Arkansas, rare lead and copper ochres, large numbers of shell beads in high status burials, and Puebloan ceramics, obsidian, shell beads and turquoise all indicate that the Late Prehistoric inhabitants of the East Fork participated to some extent in regional exchange (Figures 24, 25, and 26). While the extent of this exchange may not have been great, the presence of prestige goods in at least the

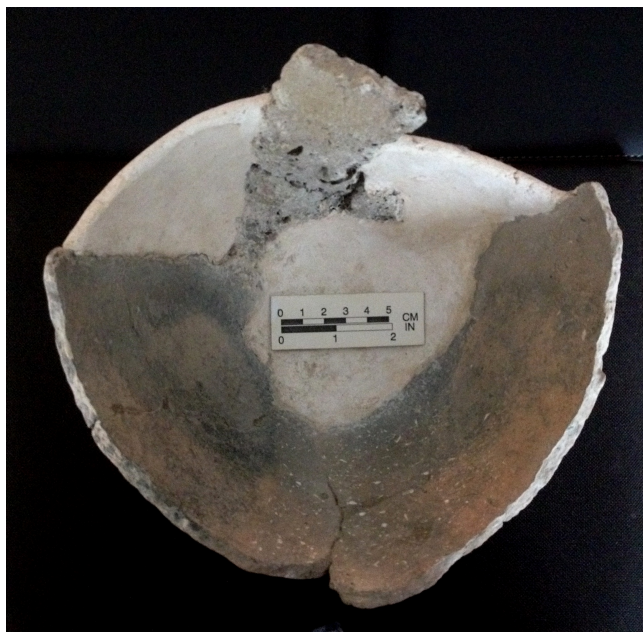


FIGURE 21. Top view of a large, flat-bottomed Nocona Plain vessel from the Upper Farmersville site, Collin County, Texas. Note the frothy nature of the over-fired portion at the top of the image. The white material is plaster placed to stabilize the reconstruction by the Heard Natural Science Museum where the vessel is curated.

largest of the East Fork sites (Upper Farmersville, Sister Grove Creek, Branch, Upper Rockwall, and Lower Rockwall) suggests that contact with other groups both to the east and to the west was made periodically. We have demonstrated that the aboriginal inhabitants of the East Fork produced specific wood-working scraping tools (East Fork Biface) that we believe were utilized in the production of bois d'arc staves and bows [25, 16]. While it cannot be positively ascertained that bois d'arc was present along the East Fork during the time of the Late Prehistoric, we believe it was likely. As such, bois d'arc would have provided the aboriginal inhabitants of the East Fork with a valued resource not only for internal use but for exchange as well. It is our opinion that the East Fork people manufactured and traded/exchanged bois d'arc, either as raw staves or as completed bows, in order to obtain prestige items from neighboring cultures, especially from west of the East Fork.

A second cluster of six radiocarbon dates frames this period of occupation along the East Fork. These include two from Upper Farmersville (Feature 1 - Beta-376327; Feature 2 - Beta-376328), three dates from Sister Grove Creek (Feature 5 - TX-2033; Feature 7 - TX-2036; Feature 11 - TX-2039), and a single date from the burial inside the rim-and-pit structure at Upper Rockwall (TX-320). Five of these dates cluster from a period of A.D. 1300-1380, with the sixth date being the youngest one from the East Fork at A.D. 1590 +/- 70. Since all but one of these dates come from features



FIGURE 22. Killough Pinched vessel from the Upper Farmersville site, Collin County, Texas.



FIGURE 23. Bison scapula hoe #4 from a burial containing eight such artifacts from the Upper Farmersville site, Collin County, Texas.

within a rim-and-pit structure, the dates conclusively show that the pits were still in active use at this time. Based on continued presence of hearths, abundant fire-cracked rock and deer and turtle bone, no change in function of the pit structures is seen.

Lynott [26] and Prikryl [5] defined this Late Prehistoric period as either *Neo-American Late* or *Late Prehistoric II* and framed it temporally between ca. A.D. 1250 and 1700. As this level was first revealed to us stratigraphically in our excavations at the Upper Farmersville site, we have named this second Late Prehistoric occupation along the East Fork of the Trinity River as the *Farmersville Phase*.

Based on the lack of any Historical period artifacts (trade beads, gun flints, metal tools) coupled with the latest radiocarbon date of 1590 +/- 70, the East Fork Late Prehistoric occupation appears to have ended around A.D. 1600. It is uncertain what caused the



FIGURE 24. Limestone *paint pot* from a trash pit in the rim of the pit structure at the Upper Farmersville site, Collin County, Texas. The gray material covering the surface of the artifact has been shown to contain residue from powdered galena (PbS). The closest source of galena to the East Fork in the Tri-State mining district in northeast Oklahoma.

ultimate demise of the aboriginal inhabitants along the East Fork, but it very well could have been the result of disease introduced by Europeans and/or environmental stress. Bruseth [65] has called the 16th century in the Caddo region along the Red River in eastern Texas and Oklahoma the *disease century*. It is known that increased sedentism and population density contribute to increasing bacteria in the environment and contributes to spreading infections [50]. Lowered resistance due to poor nutrition and/or stress enables infections to rapidly spread.

Starting in the early 11th century A.D. droughts became a periodic factor in the area of North Central and East Texas that would have resulted in stressed food supplies [66]. These dry periods became more frequent after ca. A.D. 1430 with significant periods of drought in the middle 15th century, early 16th century, and middle to late 17th centuries A.D. [67]. It has long been speculated that the Late Prehistoric inhabitants of the East Fork may have come into contact with early Spanish explorers to the region [68, 69]. If so, diseases that were so devastating to the Caddo homeland could have much more easily decimated a smaller population along the East Fork [50, 70].

All of the factors listed above are evidence for an indigenous cultural development along the East Fork of the Trinity River and its tributaries that is unique and clearly distinct from those in the surrounding regions. This cultural development began during the Woodland period in North Central Texas and carried over into the Late Prehistoric period. A drying climatic change that began in the middle of the *Wylie Phase* and became



FIGURE 25. Puebloan obsidian and chalcedony artifacts from Late Prehistoric sites along the East Fork. XRF analysis indicates that the majority of the obsidian artifacts originate in the Jemez Caldera area of north-central New Mexico. Top Row: Arrow Points - Upper Farmersville (3), Branch. Middle Row: Arrow Points - Branch (5). Bottom Row: Worked obsidian artifacts - Branch (3). (Photo by Laura Nightengale)

progressively drier with time led to the increase in bison in the Southern Great Plains, and subsequent forays by the East Fork inhabitants to take advantage of this new, high-reward resource. Seasonal westward movement for hunting led to contact with the peoples in the Elm and West Forks of the Trinity River along with those of the Southern Great Plains. As such, over time, an arrow point assemblage appeared that showed strong similarities to the Plains Indian sites. The Late Prehistoric along the East Fork persisted until the start of the 17th century when, either through disease, prolonged drought and/or famine, these aboriginal peoples disappear from the archeological record.

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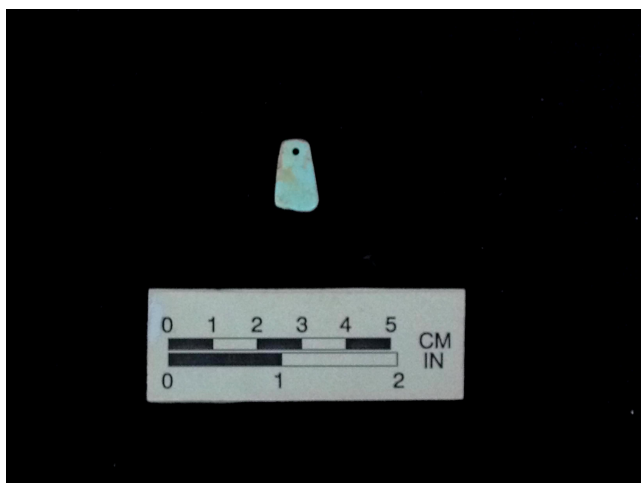


FIGURE 26. Turquoise pendant recovered from near the southern rim of the pit structure at the Branch site, Collin County, Texas. XRF analysis suggests that the source of the turquoise material may come from the Los Cerrillos area near Santa Fe, New Mexico.

in detail the condition of the Upper Farmersville site in the earliest part of the last century. We are further grateful to Judge John McCraw of McKinney, Texas who willingly made his extensive Collin County collections available for our study. Additionally, we are grateful for access to the artifacts recovered by SMU from the Sister Grove Creek site, including the comments and encouragement over the years we have received from the site's Principal Investigator, the late Dr. Mark Lynott. The Department of Anthropology at SMU further allowed us complete access to the collections from the Bird Point Island and Adams Ranch sites for the purpose of comparing them to the assemblages from East Fork sites. We would also like to thank Dr. James Krakker of the Smithsonian Institution (Museum Support Center) for allowing us complete access to the R. K. Harris collection. We also thank the Texas Archeological Research Laboratory (TARL) at Austin for always making their collections of East Fork material available for study. In this regard, we are particularly grateful for the assistance and cooperation of Ms. Carolyn Spock and Ms. Laura Nightengale for their help in obtaining access to site records, field notes and artifact collections. Ms. Nightengale also provided many of the outstanding high grade photographs of the artifacts presented in this paper. We would like to specifically thank the Heard Natural Science Museum (McKinney, Texas) and the Collin County Historical Society who sponsored early portions of this research during the 1970's. Lastly, the first author would like to thank Dr. Tom Williams of the Gault School of Archeological Research at Texas State University for his assistance in the X-Ray Fluorescence analyses presented in this study.

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