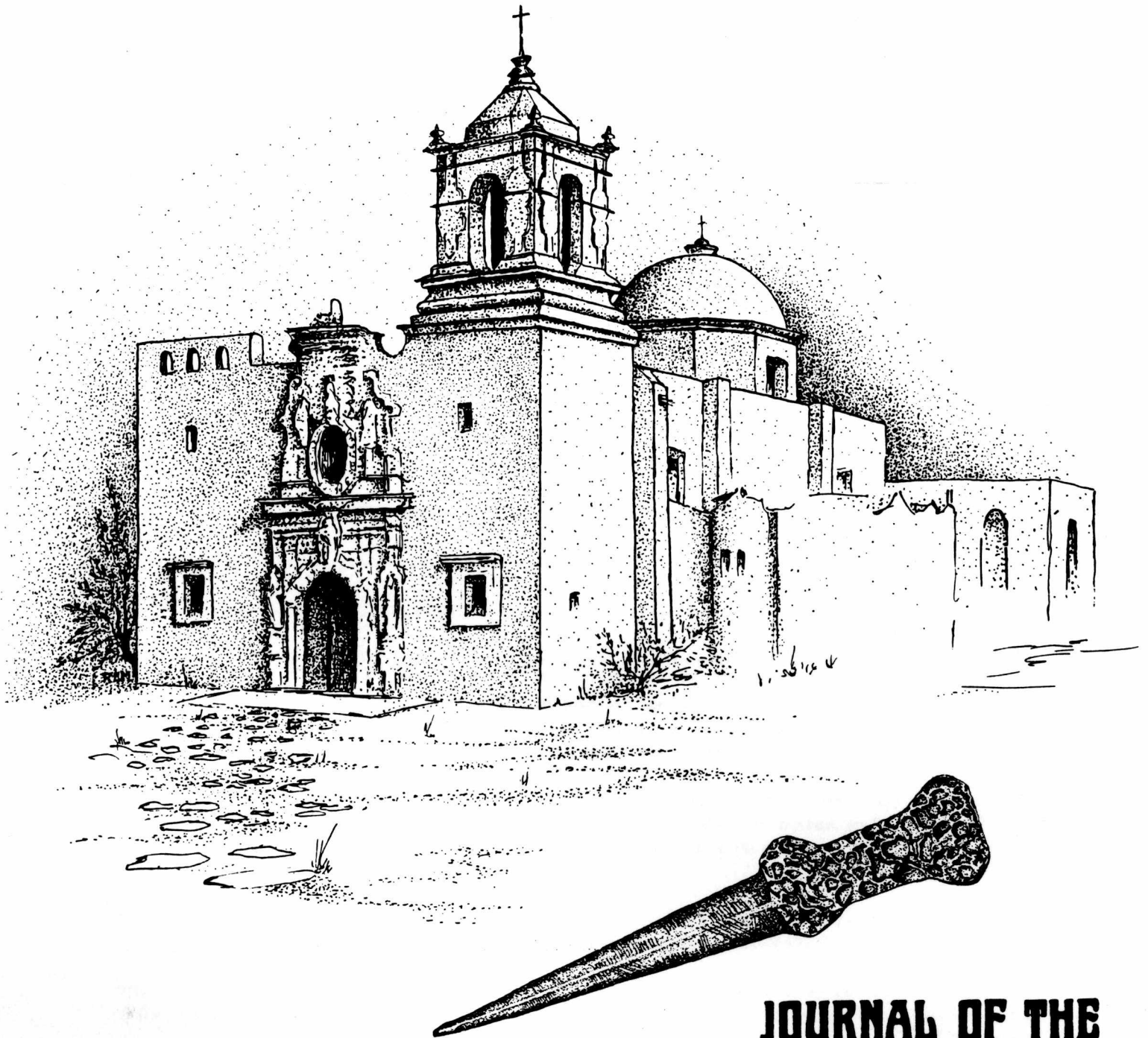


LA TIERRA



VOLUME 17, No. 3

July, 1990

**JOURNAL OF THE
SOUTHERN TEXAS
ARCHAEOLOGICAL
ASSOCIATION**

LA TIERRA

QUARTERLY JOURNAL OF THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

Volume 17, Number 3

Evelyn Lewis

July, 1990

Editor

* * * * *

NOTES ON SOUTH TEXAS ARCHAEOLOGY; 1990-3

Early Archaic "Eccentric" Lithic Artifacts in Southern
and Central Texas

(Thomas R. Hester) 1

PROBABLE SPANISH COLONIAL COPPER DIRK

(Malcom Lee Johnson) 6

AN ARROW SHAFT STRAIGHTENER FROM THE TEXAS TRANS-PECOS

(C. K. Chandler) 11

A METAL ARROWPOINT FOUND EMBEDDED IN THE MOORE-HANCOCK LOG HOUSE

41TV1405, TRAVIS COUNTY, TEXAS

(Michael B. Collins and Karen S. Collins) 13

PALEO-INDIAN ARTIFACTS FROM THE MEDINA RIVER AREA OF SOUTHERN TEXAS

(J. L. Mitchell and C. K. Chandler) 20

INTERACTIONS BETWEEN INDIANS OF THE SOUTHERN PLAINS AND THE SOUTHEAST WOODLANDS

(Leland W. Patterson) 26

POSSIBLE ALMAGRE POINTS FROM THE PANTHER SPRINGS CREEK SITE, BEXAR COUNTY, TEXAS

(Richard E. Townsend, Jr.) 32

AUTHORS..... 38

INFORMATION FOR CONTRIBUTORS 40

* * * * *

About the Cover: San José Mission in San Antonio is pictured by Richard McReynolds, and a Spanish dirk, drawn by Malcom Johnson, is shown in association with the mission. See Page 6, this issue.

Manuscripts for the Journal should be sent to: Editor, La Tierra, Evelyn Lewis, 9219 Lasater, San Antonio, Texas 78250. Copies of past issues of the Journal and Special Publications are available from: Bette Street, 6592 Kings Crown E., San Antonio, Texas 78233.

For membership information contact the Membership Chairman (Interim): Kay Allison, 301 East Rosewood, San Antonio, Texas 78212 (512-733-1744).

For use of the STAA Lending Library, contact Anne Fox or Kay Allison at the Archaeology Laboratory, The University of Texas at San Antonio, San Antonio, Texas 78285.

Library of Congress Catalog No. 76-649774.

All articles in La Tierra are now summarized in Abstracts in Anthropology published by the Baywood Publishing Company.

La Tierra is now printed on acid-free paper.

All contributions to this Non-Profit organization are tax deductible.

NOTES ON SOUTH TEXAS ARCHAEOLOGY: 1990-3

Early Archaic "Eccentric" Lithic Artifacts in Southern and Central Texas

Thomas R. Hester

An author has to be careful when using the term "eccentric" in archaeological writing -- lest the label be attached to the practitioner of the discipline and not to a curiously-shaped artifact. In Maya archaeology, oddly-chipped chert and obsidian artifacts have been called "eccentrics" since the 1920s. Harry Shafer and I have recorded a number of these (the artifacts, that is) in Belize. In the Maya area, such artifacts are often quite large and are intricately chipped; they were sometimes placed in special caches, offerings, and tombs.

In the Texas area, the only lithic "eccentrics" that we are likely to encounter are the fake "thunderbirds" and other latter-day lithic whimsies sold to unsuspecting relic collectors. The owners of these often show them to professional archaeologists and are most unsatisfied, if not angry, when these objects are labeled as fraudulent. This is often a delicate situation, as there are usually detailed stories about the "discovery" of these "thunderbirds" or other "ceremonial" pieces. Indeed, in past years, I may have cast a very doubtful eye on some of these artifacts, dismissing them as fakes, when at least some of them may have been authentic.

This matter came to mind during the recent Texas Archeological Society field school at Utopia. In the excavations at site 41UV132, a Uvalde point with notched lateral edges was found and carefully recorded (Figure 1, a: Hester 1990:3). I later began to go through several publications and some of my files, and noted a number of other specimens that dated, like the Uvalde point, to the Early Archaic, and which had also had multiple notches.

Thus far, most of the Early Archaic "eccentrics" that I have been able to track down are related to the Bell and Andice point types (Turner and Hester 1985). These specimens are usually very carefully flaked and are distinguished by deep basal notches and large barbs. It now appears that the ancient knappers who made these points, which required considerable skill, would also chip deep notches into some of the points and other bifaces associated with the Bell/Andice lithic technology.

For example, I excavated one such specimen at the La Jita site (41UV21; Hester 1971; I labeled it a "Bulverde" point at the time). This artifact (Hester 1971:Figure 10, d; see Figure 1, b) is an Andice point, made of opaque light brown chert, with a notch chipped from the distal end into the central part of the body.

An artifact similar to the La Jita specimen was found years ago in Dimmit County by J. W. House (Hester 1963a:6). It, too, appears to have been an Andice point, notched on the lateral edges, and with a deep notch originating at the distal end of the point (Figure 1, c).

Several Bell points with notched lateral edges have also been recorded. One comes from the upper Barton Creek drainage in Hays County (private collection). It is made of a glossy gray chert, possibly heat treated (Figure 1, d). A second specimen, also a Bell point, is from Dimmit County (B. Vollbrecht collection; Hester 1963b:2). It was very well made, and like the 41UV132 Uvalde point, had two opposing notches in the lateral edges (Figure 1, e).

Bement (in Kenmotsu 1982:89; Figure 19, d) has reported what he termed a "denticulate dart point." Distinctive notches are found on the lateral edges and small notches have been added to the base of the stem. I have reexamined this specimen (Bastrop County; 41BP191) in the TARL collections. In technology and

flaking patterns it appears to me to be a Bell point; one barb is broken and the other corner, which seems to have been an "extension" of some sort, is also broken away (Figure 1, f). It is made of a translucent light tan chert; to me, it has a waxy appearance, perhaps heat-treated material.

Another point with notched lateral edges, likely also of the Bell type, has been published by Woerner and Highley (1983:21). This specimen is from the Brom Cooper collection derived from surface sites in McMullen County (Figure 1, g).

However, the most "eccentric" artifacts in the Bell/Andice tradition are represented by at least three specimens, all provenienced artifacts of certain authenticity. One specimen was excavated at the Shrew site (41WN73) in Wilson County (Labadie 1988:63, Figure 25, c). Labadie attributed the specimen to the Bell/Andice category and described it as a "reworked" point. It is of light brown chert, semitranslucent, and, thought by Labadie, (p. 63) to have possibly been heat-treated. The specimen (Figure 1, h) clearly has a distinctive Bell/Andice barb, but several other notches are also present.

The Shrew site specimen seemed "unique" until an amateur archaeologist in the Rio Grande Valley recorded a very similar artifact, in a private collection, from a site on the Mexican side of Falcon Lake. Made of opaque tan-gray chert, it has (like the Shrew site artifact) a distinct barb, but with other notches of uncertain function. In another private collection from the same site there is a multi-notched Bell point, with a stem, deep notches on one lateral edge, notches and protrusions on the opposite edge, and possibly, a distal notch (Figure 1, j). It is made of tan chert.

In talking with several central Texas archaeologists, most were unaware of these Early Archaic multi-notched artifacts. Elton Prewitt (personal communication) recalls seeing such a specimen in a private collection from the Gault site (on the Bell/Williamson counties boundary; 41BL323/41WM9). Interestingly, one of the reasons that looters are destroying that site today -- digging plots leased to them by the landowner -- is because of an Andice stratum that has yielded many projectile points of this style. The Gault site is Prewitt's (1983) type site for Andice.

CONCLUDING REMARKS

This note has documented several multi-notched Early Archaic "eccentric" lithics from central and southern Texas (Figure 1, Table 1). With the exception of the Uvalde Point from 41UV132, the remainder of the specimens appear to be related to Bell/Andice point technology. These Early Archaic types -- Uvalde, Bell, Andice -- were originally defined for central Texas, but are widely distributed (especially in the case of Bell and Andice points) across south Texas and the neighboring central coastal plain. Radiocarbon dates are few, but they likely occur within a time frame of ca. 5500-3500 B.C. The Uvalde type, along with other early corner notched forms (e.g., Martindale and their Lower Pecos equivalents, Baker and Bandy) appear to have preceded the basal notched points

(Page 3) >>>

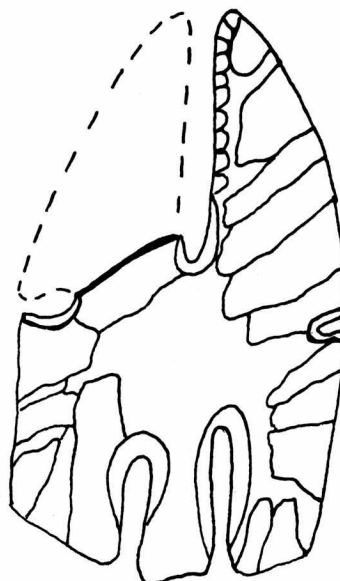
Figure 1. Multi-Notched Early Archaic Lithics. a. Uvalde County, Smith site (41UV132); b, Uvalde County, La Jita site (41UV21); c, Dimmit County (J. W. House collection); d, Hays County (private collection); e, Dimmit County (Vollbrecht collection); f, Bastrop County, 41BP191 (TARL collections); g, McMullen County (Brom Cooper collection, UT-San Antonio); h, Wilson County, Shrew Site (41WN73); i (both sides), j, Falcon Lake area, Mexican side, across from Zapata County (private collections). Specimen g from Woerner and Highley (1983); specimen i drawn by Pam Headrick, TARL). Specimen j is not to scale.



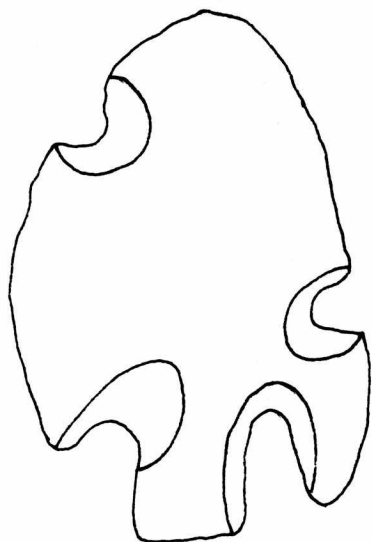
a



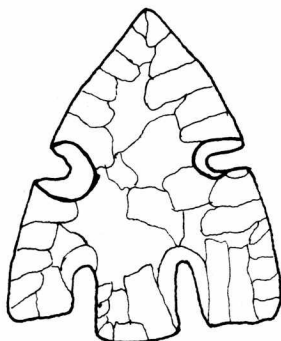
b



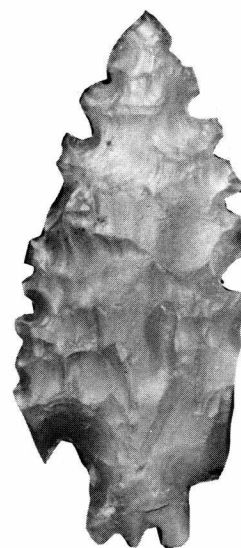
c



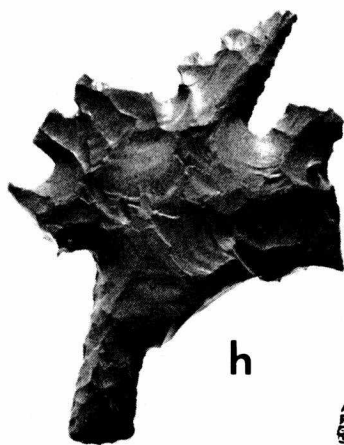
d



e



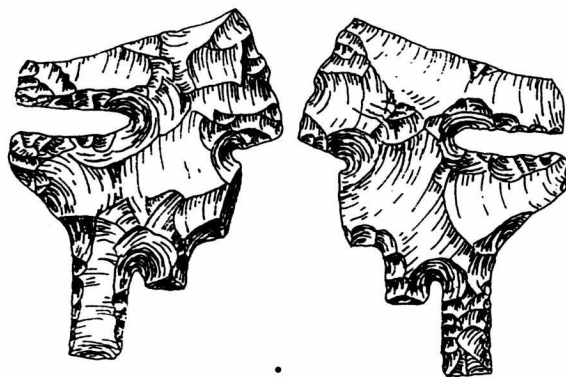
f



h



g



i



j



of the Bell/Andice (and Calf Creek) horizon (see Sorrow, Shafer and Ross 1967; McKinney 1981). This temporal separation needs better definition. Elton Prewitt (1981) has grouped all of these types in his Jarrell Phase in central Texas. In recent discussions, Prewitt (personal communication) now also thinks that the corner notched forms may have been earlier than the basal notched types.

Although we can provide approximate dates for the multi-notched specimens, we can say little about their function. It was clearly a difficult task to chip the deep basal notches in Bell and Andice points (see Weber and Patterson 1985). One might speculate that the multi-notched specimens (especially those from the Shrew site and from Zapata County) might have resulted from the need to "practice" such skills! Or were they merely showing off? Archaeologists have major problems when delving into the reasons for deviations in ancient patterns, technological or cultural. We tend to label such aberrations as "ceremonial" or "ritual" -- or to take the safer route and simply use terms like "eccentric." At the present, all we can do is to suggest that this is a lithic form that is a trait largely of the Bell/Andice horizon and to hope that future research will better define these specimens both culturally and functionally.

TABLE 1. Dimensions of Multi-Notched Early Archaic Lithics.

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>	<u>Weight</u>
Figure 1, a	78	39.5	7.5	18.8
Figure 1, b	54.5	39	7	12
Figure 1, c	76.5	44	-	-
Figure 1, d	71	48	-	-
Figure 1, e	45	37	-	-
Figure 1, f	71*	31	5	11.6
Figure 1, g	45	35	5	7
Figure 1, h	61	45	-	-
Figure 1, i	49	35	4.5	6.3
Figure 1, j**	-	-	-	-

Measurements are in Millimeters and weights are in grams.

* Erroneously published as 7.9 cm in Kenmotsu (1982:89).

** Estimates based on color photograph of the specimen indicate it is roughly 65 mm in length and 60 mm wide.

REFERENCES CITED

Hester, Thomas R.

1963a Rare and Unusual Dimmit County Artifacts. *Pena Pow-Wow* 1(6):6. Newsletter, Carrizo Springs (Texas) High School Archeological Society.

1963b Examination of Collections Yield Rarities. *Pena Pow-Wow* 1(9):2. Newsletter, Carrizo Springs (Texas) High School Archeological Society.

Hester, Ths. R. (Continued)

- 1971 Archeological Investigations at the La Jita Site, Uvalde County, Texas. *Bulletin of the Texas Archeological Society* 42:51-148.
- 1990 Summary of Archeological Investigations by the Texas Archeological Society Field School, Utopia, Texas, 1990. *Texas Archeology* 34(3):3-5.

Kenmotsu, Ray D.

- 1982 Cultural Resource Investigations at the Powell Bend Prospect, Bastrop County, Texas. With contributions by Leland C. Bement and David G. Robinson. *Texas Archeological Survey, Research Report* 84, The University of Texas at Austin.

Labadie, Joseph H.

- 1988 Archaeological Investigations at the Shrew Site, 41WN73, Wilson County, Southern Texas. State Department of Highways and Public Transportation, Highway Design Division, *Contract Reports in Archaeology* 2. Austin.

McKinney, Wilson W.

- 1981 Early Holocene Adaptations in Central and Southwestern Texas: The Problem of the Paleoindian-Archaic Transition. *Bulletin of the Texas Archeological Society* 52:91-120.

Prewitt, Elton R.

- 1981 Cultural Chronology in Central Texas. *Bulletin of the Texas Archeological Society* 52:65-90.
- 1983 Andice: An Early Archaic Dart Point Type. *La Tierra* 10(3):1-6.

Sorrow, William S., Harry J. Shafer, and Richard E. Ross

- 1967 Excavations at Stillhouse Hollow Reservoir. *Papers of the Texas Archeological Salvage Project* 11. The University of Texas, Austin.

Turner, Ellen S. and Thomas R. Hester

- 1985 *Field Guide to Stone Artifacts of Texas Indians*. Texas Monthly Press, Austin.

Weber, C. D. and L. W. Patterson

- 1985 A Quantitative Analysis of Andice and Bell Points. *La Tierra* 12(2):21-27.

Woerner, Michael C. and Lynn Highley

- 1983 The Bromley F. Cooper Collection of Pre-Archaic and Archaic Dart Points from McMullen County, Texas. *La Tierra* 10(1):3-28.

PROBABLE SPANISH COLONIAL COPPER DIRK

Malcom Lee Johnson

ABSTRACT

The purpose of this paper is to describe a small copper knife or dirk that was found near Mission San José in San Antonio, Texas, and to discuss tools available to do metal working.

LOCATION

This small copper dirk was found by Mr. Charles Covey while working in the process of laying water or sewer lines. Mr. Covey has been deceased for a number of years, but according to a relative, Mr. Mifflin Dove, it is believed the copper dirk was found "in the 1920s, in the vicinity of Mission San José" Bexar County, Texas (Mifflin Dove, personal communication, 1959, 1989).

DESCRIPTION

This dirk (Figure 1) is made from a flat piece of copper (or bronze with a high copper content) that is approximately 4.6 mm (3/16 inch) thick. The unmodified surface of the handle, or hilt, clearly shows indentations from being hammered over its entire area, on both faces. The size of the indentations seems to indicate that a fairly small size hammer was used, or perhaps, a ball-peen type hammer.

The dirk is widest across the pommel area of the handle, where it measures 31 mm (1 7/32 inch). The handle is approximately 61.5 mm (2 7/16 inch) long, from the front of what would normally be the finger guard area, to the end of the pommel. The finger guard area is 29.2 mm (1 5/32 inch) wide.

The long, narrow, double-edged blade is 102.4 mm (4 1/32 inch) long. The blade is 18.7 mm (3/4 inch) wide at the hilt, with straight edges that taper to a rounded point about 2.2 mm (3/32 inch) wide. The distal tip of the blade is slightly bent, but otherwise the dirk is in good condition. It has a reddish-brown patina over the entire surface.

It appears that the hilt was sawn to shape and the edges filed and hammered to smooth and remove some of the marks.

Judging from the small flats on both edges of the pommel and finger guard areas of the handle, the entire dirk may have been sawn out of a rectangular shaped copper blank.

The blade has been extensively filed on both faces to form sharp edges. It also appears that a fine-tooth rasp may have been used to remove some of the material more quickly. A central ridge extends the full length of the blade on both faces, giving the blade a diamond-shaped cross section.

There are no holes for rivets for attaching wooden or bone handles. However, it is entirely possible that the handle may have been wrapped with leather.

The base of the handle or hilt shows some light battering, as though it may have been pounded into a tree, or the ground, or perhaps from hitting, butt first, while being used as a throwing knife.

DISCUSSION

At first the idea of a knife or dirk being made of copper or bronze here in the New World may seem out of place.



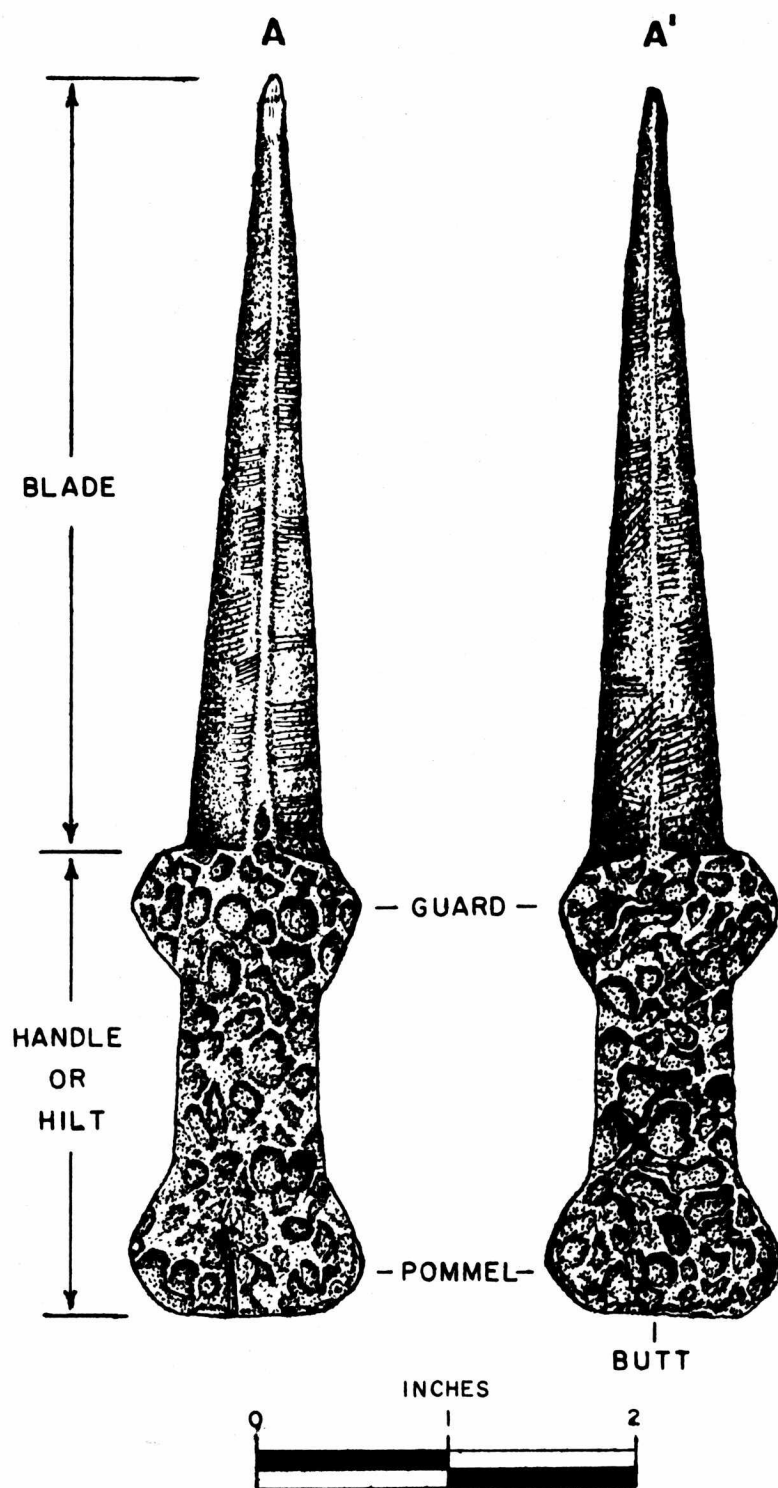


Figure 1. Probable Spanish Colonial Copper Dirk found at Mission San José, San Antonio, Texas. Drawn by the author.

However, after an examination of some of the published literature, it becomes apparent that many various articles were made of copper or brass, especially during the Spanish Colonial period.

In 1968 a sprinkler system and electric generators were installed at Mission San José, San Antonio, Texas, and many artifacts were collected from the backdirt by Witte Museum staff, including the following copper and brass items (see Schuetz 1970:5-31): 2 pieces of flat copper; copper handles from chocolate pot; (Figure 3 of reference); brass keyhole plate; copper buckle; 2 thin copper strips; 9 copper fragments; 1 copper chapatone; 1 copper bar 0.5 cm square; 2 thin copper fragments; 1 copper tinkler; brass stirrup buckle (Figure 7, A of reference); 1 copper patch with rivets; bronze pot hangers (Figure 8, A, B. of reference); brass and copper aspergillum fragments; part of a flat brass blade 1/8 inch thick and 8 3/4 inch long; part of a large copper frying pan; 9 assorted copper fragments; brass butt plate for musket; fragment of heavy brass (part of ingot ?); large sheet of heavy copper hammered into funnel shape; 2 copper kettle handles. Many of these artifacts came from the large pits which were dug through Spanish Colonial midden deposits for the installation of the electric generators (ibid.).

During 1967 a large amount of controlled excavation was carried out at Mission San Juan Capistrano, San Antonio, Texas. The excavation was prompted by plans for restoration of some parts of the mission by the Archdiocese of San Antonio. Excavations were conducted by the Witte Museum staff and volunteers, and by volunteer members of a field school sponsored by the Witte Museum from July 22 through July 30, which my wife and I attended.

During the excavations a large number of artifacts were recovered, but only the copper, and some brass, artifacts will be discussed here.

Five pounds and fourteen ounces of copper artifacts were recovered and identified as "Spanish Colonial." Most of the copper fragments and artifacts came from the rooms built on the Indian middens (Schuetz 1969, Vol. 1, Figure 19, pp. 48,49).

Some of the identifiable copper artifacts are as follows: chapatone, jewelry, brass sword hilt, compound copper crucifix (Plate 21, A-A'), cross set with cobalt blue faceted glass beads (Plate 21-F), buttons, patching, hoe (?), patches, kettle handles, crudely made spear point, and chain mail (Schuetz 1969:48,49). Most of these copper and brass objects were made in Mexico and transported up to the missions (jewelry, kettles, etc.), but sheet copper was obviously brought up as well, for use in tool making and patching (ibid.)

In preparation for publishing the data recovered in the excavations, the Witte Museum staff consulted many Spanish records dealing with the missions. Two of these translated documents are of particular interest, as they make inferences of metal working being done by the mission Indians during the Spanish Colonial period.

During his visit to the missions in 1762 Fray Mariano Francisco de los Dolores mentions the crafts that have been taught to the Indians. He states: "They work at their weaving, in the forge, others as carpenters..." (Schuetz 1968:24).

In 1767 Padre Fray José de Solís visited San Juan Capistrano and San José. In writing of San José he noted: "The Indians themselves take care of the work...carpenter shop, forge, tailor shop..." (Schuetz 1968:48).

From these observations about working in the "forge," it is clear that the mission Indians were doing metal work/blacksmithing at least as early as 1762, and probably earlier. And since the heaviest concentration of brass or copper artifacts appears to occur during the Spanish Colonial period, it is probably safe to assume the dirk is also from that period, although not absolutely certain.

Since the copper dirk shows extensive filing, it raises the question of when files were introduced, and who would have access to them.

Flat files made of bronze are known from Egypt by about 1500 B.C. A combined round and flat file of bronze is known from Europe by 400 B.C. A treatise of 1100 A.D. mentions square, round, triangular, and other shaped files. They were made of carburized steel, which could be hardened after they were cut. They were also being hand cut with hammer and chisel, which must have been a very slow and tedious process, which in turn would also have made them expensive.

The first known file making machine has a date of 1750, a century before machine-made files replaced those cut by hand (Benton 1978-74:619).

While we may not know the exact date machine-made files made their way to Texas, we can probably safely assume it took several years, perhaps not even until the 1770s or 1780s, before they were in common use. The mission forges mentioned by Dolores in 1762, and by Solís in 1767, were very likely still using handcut files.

This in turn raises the intriguing question as to whether a metal artifact (arrowpoint, axe, knife, etc.) could be relatively dated by examining any visible file marks under a powerful microscope. Very evenly spaced marks could indicate use of a machine made file, while irregular or unevenly spaced marks could indicate use of a handcut file, which in turn would tentatively date the artifact as, say, possibly pre-1770 or 1780.

Although the file marks on the blade of the copper dirk appear somewhat irregular under the limited magnification available to me, much more study and comparison would be needed before any definite conclusions could be reached.

According to a recent article a brass projectile point has been reported from Nueces County, site 41NU209 (Bauman 1988). Aside from the point itself it is particularly interesting that a number of Spanish Colonial ceramics have also been found in the same area. If copper and brass were a more favored material during Spanish Colonial time, as seems to be indicated by the artifact record at missions San José and Capistrano, then the brass point may date from the early Spanish Colonial period, and may pre-date the eight iron projectile points from nearby Fort Lipantitlán, site 41NU54 (Kennedy and Mitchell 1988).

In the early 1960s, based on historic documents that he had researched, Mr. Dan Kilgore of Corpus Christi, Texas, postulated that the location of Rancho Diezmero was on the Nueces River in the vicinity of site 41NU209. Rancho Diezmero was a Spanish Colonial ranch site that was occupied perhaps as early as 1790. The grant was perfected in 1805 and the ranch was destroyed in an Indian attack in 1814. About fourteen people were massacred. Diezmero is Spanish for tithe or tax collector (Dan Kilgore, personal communication, 1965, 1988).

CONCLUSION

From the artifact record at San José and San Juan Capistrano Missions, it appears that the most prolific use of copper and brass artifacts occurred during the Spanish Colonial period. With these findings in mind, we may assume that the dirk possibly dates from the Spanish Colonial period also, although this cannot be stated with certainty.

Files, which are important metal working tools, were all handmade prior to 1750, when the file making machine came into use. We can probably assume it was several years, perhaps in the 1770s or 1780s, before machine made files were in common use here in Texas. And perhaps it was even later before they were available in sufficient quantities to become common trade items to the Indians, so that they could make their own metal points or knives. This is not intended to imply that no handmade files were traded or obtained in other ways by the Indians. Rather it is a suggestion that handmade files may have been too expensive or time consuming to produce to be used as a general trade item. Nor is it implied that no iron projectile points were traded or made by the Indians during Spanish Colonial times; they probably were.

AN ARROW SHAFT STRAIGHTENER FROM THE TEXAS TRANS-PECOS

C. K. Chandler

ABSTRACT

This report documents a grooved stone from southern Terrell County in the eastern Trans-Pecos area of Texas. These kinds of grooved stones have been ethnographically documented as being used for straightening of arrow shafts.

THE ARTIFACT

The specimen illustrated in Figure 1 is from Southern Terrell County (see insert below). It is a dark charcoal gray to black color and is made of vesicular basalt. All surfaces, including the groove, are smoothed and polished. Multidirectional striations are visible on all surfaces under low magnification. These striations were probably produced in the shaping of the artifact but the polish appears to be from use. There is a single transverse groove at right angles to the long axis near the center. There are parallel striations and heavy polish in this groove. Artifact dimensions are: L, 90 mm; Max. W, 45 mm; Max. T, 27 mm and weight is 132 grams. The groove has rounding edges and is 43 mm long, 15 mm wide and 7 mm deep.

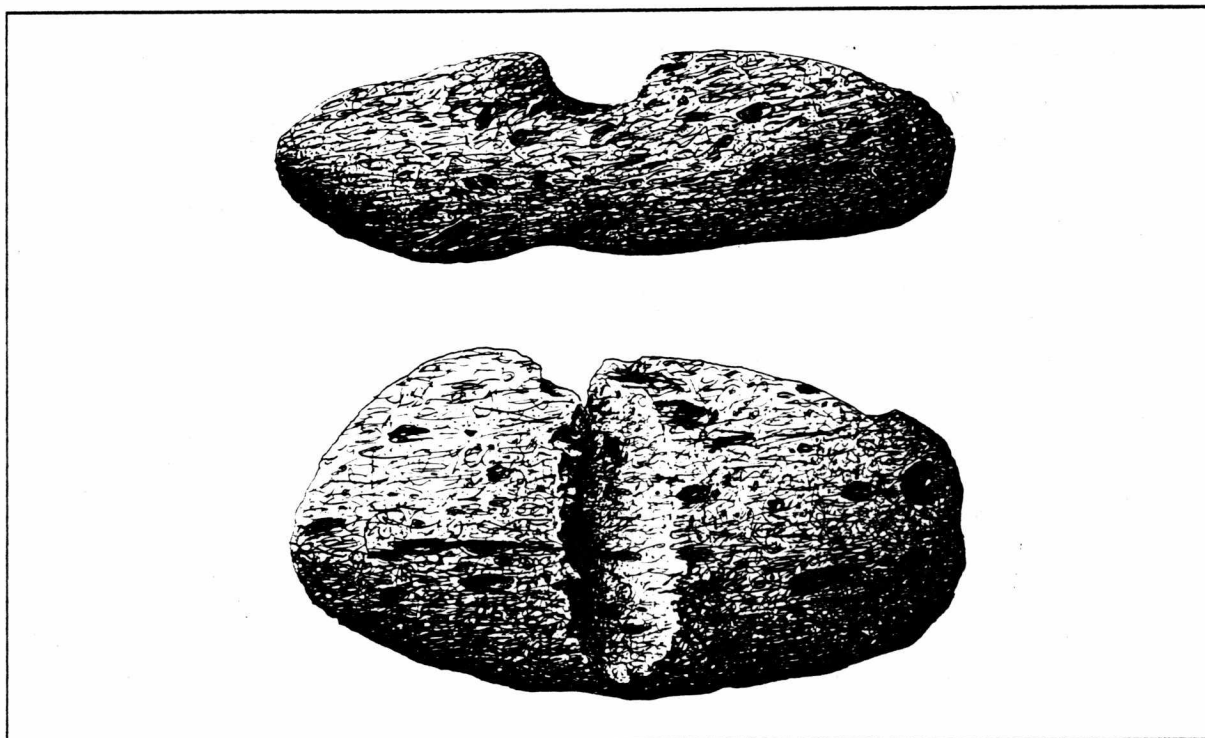
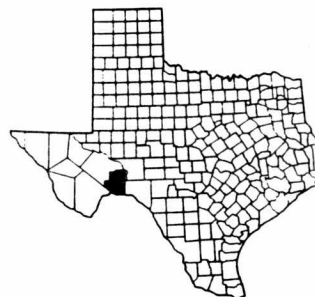


Figure 1. An Arrow Shaft Straightener of Vesicular Basalt. Drawings by Richard McReynolds.

Bill (1862) states that an arrow is about 1/4-inch in diameter before the bark is removed, and Schumacher (as noted in Hester, et al. 1988:1) says they are about 5/16-inch in diameter. The width of the groove in this specimen is more like 5/8-inch in diameter. This larger size may indicate that this specimen was used for working with lance or atlatl shafts instead of arrows.



In an 1862 army medical paper concerning arrow wounds Bill describes the making of arrows, including a method of straightening them. This method is as follows: Usually the shaft is made from a limb of a dogwood tree. A limb of a 1/4-inch diameter is taken, soaked in water, the bark peeled off, and then cut into suitable lengths.

The straightening process is now commenced. The ends to be straightened are squared off, and two small and flat strips of wood are placed transversely, as regards the axis of the piece, and firmly lashed, one to each end of the latter, in the manner of a cross. One of the sticks is held between the teeth as the other is grasped in the hand. This end is now twisted to and fro by rotating the slip grasped by the hand after the manner of a trephine. The fibers of the stick to be straightened eventually assume a spiral twist at the same time the stick itself is found to be straight. Often it will require three days to straighten a single shaft.

This method of arrow shaft straightening differs considerably from that described by Schumacher and reported by Hester, et al. (1988) in *La Tierra*. Stone arrow shaft straighteners are not common in any area and their scarcity appears to support the possibility of other methods of shaft straightening.

Turner and Hester (1985:246-247) illustrate several incised and grooved stones, noting that they are often made of limestone. Nearly all of those reported in central and south Texas are of limestone and most of these have been thermally fractured. In other areas, notably southern California and the American Southwest, grooved stones are often made of materials such as serpentine and soapstone, which are much more stable when heated than is limestone.

There have been no previous records describing the use of basalt in the manufacture of these artifacts. It is suggested the artifact reported here was used as an abrader in the smoothing of lance or atlatl shafts. This artifact was found in the mid-1950s and is in the family collection of Ruth and Walt Carruthers. I wish to thank them for the loan of this specimen for documentation and illustration. My thanks, also, to Richard McReynolds for the excellent drawings of it.

REFERENCES CITED

- Bill, J. B.
1862 Notes on Arrow Wounds. *American Journal of Medical Science*.
- Hester, Thomas R., Fred H. Stross and Dorothy M. Brown
1988 Arrow Shaft Straighteners in Southern Texas and Some California Ethnographic Comparisons. *La Tierra* 15(3).
- Turner, Ellen Sue and Thomas R. Hester
1985 A Field Guide to Stone Artifacts of Texas Indians. Texas Monthly Press, Austin.

**A METAL ARROWPOINT FOUND EMBEDDED IN THE MOORE-HANCOCK
LOG HOUSE (41TV1405), TRAVIS COUNTY, TEXAS**

Michael B. Collins and Karen S. Collins

ABSTRACT

A metal arrowpoint found embedded in the log wall of a 19th century house in Travis County is described and discussed.

BACKGROUND

A metal arrowpoint (Figure 1) was found by the authors embedded in the end of a wall log of a double-pen, dogrun log house in east-central Travis County. Historical documents and other evidence discussed below provide the context necessary for interpreting the time and circumstances under which this point came to be in the wall of this house.

DESCRIPTION

The point is of sheet iron. The nature of the original piece of metal is unknown, but its thickness and surface character are not unlike those generally observed on metal arrowpoints, and, therefore, it is possible that the point was fashioned from barrel hoop metal or from some other object. On the other hand, it may have been made from metal stock intended solely for the purpose of making arrowpoints. The specimen is generally in good condition except that the stem is broken off close to its juncture with the blade. Evidently, prior to this break, the point was stemmed and had two short squared-off barbs, which are still intact (see Figure 1). The notches between the stem and the barbs are

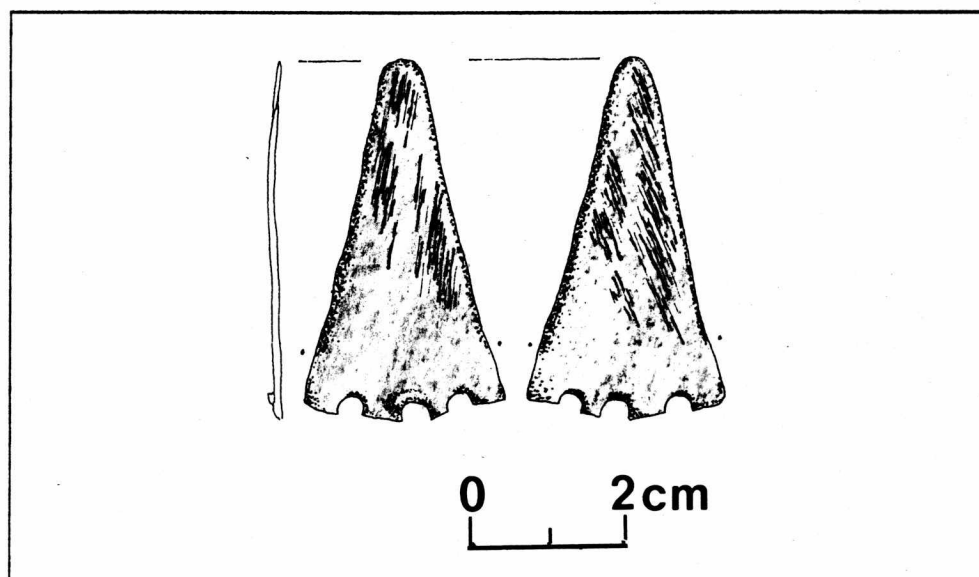
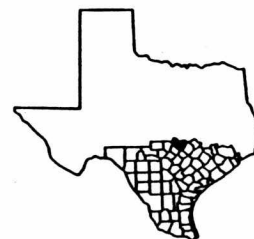


Figure 1. Metal arrowpoint found in log wall of the Moore-Hancock house (41TV1405) Travis County, Texas.



segments of round holes drilled or stamped through the piece. The diagonal cut into each hole formed the basal end of each barb. Presumably, similar cuts

**A****B**

Figure 2. Location of point in log wall, Moore-Hancock house. A, general view of southeast corner of log house with one layer of siding still in place on south exposure. Arrow points to location of arrowpoint; B, closeup view of arrowpoint in place.

formed the lateral edges of the stem, the form of which is unknown. The specimen in its present condition is 47.6 mm long, 24.6 mm wide at the barbs, and 1.4 mm thick. The width across the existing part of the stem, an indication of shaft diameter, is 10.3 mm and the extant portion weighs 4.1 grams. The lateral edges are bifacially beveled from the tip almost to the ends of the barbs, but the left edge of each face has a slightly wider bevel, presumably the result of a right-handed person sharpening the edges of the point with a file while it was hafted. Along these bevels are minute striations considered to be file marks oriented perpendicular to the edge. The tip is moderately rounded. There is a very slight double bend to the longitudinal section of the point, probably the result of impact.

The point was found almost completely embedded in the cut end of a juniper (*Juniperus ashei*) wall log (Figure 2) at the southeastern corner of the main structure of the Moore-Hancock farmstead (site 41TV1405). Also at the site are a hand-dug well, a stone outbuilding, and a log outbuilding. What remains of the farmstead is now well within the city limits of Austin, but was a rural farmstead some three or four miles northwest of early-day Austin on the east side of Shoal Creek Valley near the confluence of Shoal Creek and Hancock Branch.

DISCUSSION

The site is currently under investigation and its buildings are being restored (Davis 1990). As part of this restoration, several badly deteriorated, 20th century additions to the log house were removed. It was when the wall of one addition, and two layers of siding were removed from what had been the outside corner of the log house, that the point was discovered (Figure 2a). Only about three millimeters of its basal edge were protruding from the log (Figure 2b). A full report of the architecture, archaeology and history of the site is in preparation.

The metal in this point is too thin to withstand being driven into wood by hammering; it had to have been propelled into the wood with considerable velocity. We think there is little doubt that it tipped an arrow which was shot into the corner of the building with a bow. If this is the case, the arrow struck the east side, or front, of the house about 3.3 feet (1.02 m) above the ground in a slightly downward trajectory. Projecting back along the trajectory, three or four plausible positions of the archer may be inferred. If the arrow were shot from close range directly at the building by someone standing on the ground, that person would have been roughly 10 or 12 feet (3-4 m) away. If fired at close range by a mounted archer, the archer's position would likely have been about 25 feet (8 m) away. The arrow may have been shot from a considerable distance in an arching trajectory, and, if so, it travelled a greater but unknown distance. A less likely alternative might be that it was shot by someone in a tree at some intermediate range.

HISTORY

The provenience of the point provides some pertinent information about its age and cultural affiliation, but raises a number of questions which cannot be answered at this time. Documents pertaining to the land and the persons who owned it do not specifically refer to a house at this location prior to 1858, but indirectly suggest that a house was built there between 1846 and 1851 by Martin and Elizabeth White Moore. Elizabeth Moore had inherited the tract of land on which the house stands from her father, Gideon White, in 1846. (G. White died in 1842, the tract was assigned to Elizabeth in 1846, and she recorded the deed in 1848). Tax records indicate that Martin Moore, who had been a merchant in Austin since 1839, began in 1846 to acquire horses, cattle, a wagon, and adjacent property, and to reduce his store inventory by 1850. In 1852 Moore listed his address as "4 miles north of Austin." An agreement filed in 1858 locates the

Moore home at the spot that is now site 41TV1405. Archaeologically, numerous domestic artifacts, such as blue feather edge ware, are consistent with a late 1840s residence at the site. Architecturally, the structures are typical of rural farm buildings throughout the 19th century (Jordan 1978) and, so far, attempts to determine the date of construction using tree rings in samples of pine door and window frames have not been successful. At present, then, it seems probable that the log house in which the metal arrowpoint was embedded was standing by 1858, and possibly as early as 1846 or 1847. It evidently was little altered, at least as regards the southeastern log corner, from the time it was built until after the turn of the century. It is clear that the point came to rest in the log wall sometime in that interval.

The house remained in the Moore family until 1866 when it, and the land on which it stood, were sold to Judge John Hancock. From 1866 to 1899 it was owned by the Hancock family and operated as a dairy from sometime around 1870. It is doubtful that John Hancock ever lived in the house, but probably his nephews, James and William Hancock, occupied the house and operated the dairy for Judge Hancock. It is relevant to note that John Hancock was a Unionist whose opposition to Texas' secession brought him deep resentment and sufficient risk of harm from Confederacy-minded Austinites that he spent part of the Civil War in exile in New Orleans. After the war, Hancock's Unionist stance made him one of the few Texans who could serve in the United States Congress during Reconstruction, and he served as representative for four terms (1871-1877, 1883-1885).

After being owned briefly by Franz Fiset from 1899 to 1901, the dairy tract became the property of John P. P. and Hulda Rosenquist Wallis and remained so until 1952. Early in the Wallis period the house underwent a major renovation. The log walls were covered with siding inside and out, and rooms were added to the east side. Siding covered the south exposure, and a room, as well as a porch that soon became a room, extended out to the east. Lumber company stencils and other evidence place this renovation in, or very close to, 1910. The metal arrowpoint had to be in place prior to this time because the southeast corner of the log house was completely encased in the new construction. The end of the log where the point was embedded is deeply weathered with a stained and etched zone adjacent to the metal of the point. The exposed part of the metal point is considerably more rusted than the embedded part. These facts suggest that the point had been in place for a long period before it and the log end became protected by the (approximately) 1910 construction.

CONCLUSIONS

Metal arrowpoints, of course, were an important part of American Indian weaponry in the 18th and 19th centuries, as, for example, among the Comanches (Wallace and Hoebel 1952:104). In reference to the Comanches, Frank Brown (n.d., Chapter 2, page 4) noted, "Their ordinary weapon was the bow and arrow, the latter usually pointed with iron or steel." Although with its stem missing, detailed comparison of this specimen with documented Indian points is not possible, the extant portion does compare favorably in some respects (e.g. Chandler 1989; Smith 1968:Plate 12; Lehmer 1966:Plate XVII; Lehmer and Jones 1968:Plate 18; Metcalf 1963:Plate 13). In overall size and thickness, this specimen is quite similar to those in use among American Indians. The slightly rounded tip is also characteristic of a few Indian specimens. American Indians received commercially-made arrowpoints in trade (cf. Garretson 1938:180) or acquired the materials and tools in trade and made their own (Brown and Taylor 1989). The extent of variation seen in metal points undoubtedly reflects these alternative modes of acquisition.

Depredation by Indians into Austin and nearby farms and communities occurred from the time of first settlement until about 1850 (see Table 1). If the log house were standing in the two or three years before 1850, the point could well represent an attack by Indians, particularly given its location

several miles northwest of Austin. It seems likely, though, that if such an attack occurred, it would have been noted in the newspaper. No such account has been found. The possibility that this was an Indian point must remain only that until further evidence is available.

An intriguing suggestion has been offered by Glen Parker of Houston (personal communication, 1989). Dr. Parker, who has made a study of the history of archery, noted that during Reconstruction former Confederate soldiers were sometimes denied the right to own or use firearms. Some who were thus disarmed turned to archery in order to hunt and to protect themselves (cf. Elmer 1926:112-113).

TABLE 1. Reported Indian Depredations in Travis County, Texas, 1840-1850*

<u>Year</u>	<u>No.</u>	<u>Year</u>	<u>No.</u>
1840	7	1846	5
1841	9	1847	5
1842	11	1848	0
1843	4	1849	0
1844	8	1850	1
1845	6		

* Compiled from Brown (nd), Winfrey (1959, 1960a, 1969b), and accounts in Texas Sentinel (Austin), Bulletin (Austin), Northern Standard (Clarksville), New Orleans Weekly Picayune, (New Orleans, La.), and Telegraph and Texas Register, (Houston) newspapers.

Among those resorting to archery were some who became very proficient, not only in the use of bows and arrows but also in their manufacture (ibid.). It is possible that such an archer is responsible for the point in the Moore-Hancock house. It is unlikely that John Hancock or any of his family would have been archers for this reason, since their Unionist stand would have qualified them to own firearms during reconstruction. It is possible, however, that a former rebel who resented the Hancocks did shoot an arrow that hit Hancock's building. This interpretation is not entirely satisfactory, however, because reconstruction era points were generally made with hollow sockets for hafting (Thompson 1879; Pope 1962).

Other possible explanations for the presence of this point have to be considered. Anytime between the construction of the log walls and the approximately 1910 remodeling, an arrow with a home made tip could have been shot into the wall by children playing or by some self-styled archer. As more is known about the time of construction of the log house and about styles of metal points made and used by Texans since 1850, the better the alternative interpretations may be evaluated.

ACKNOWLEDGEMENTS

We thank Dr. Glen Parker of Houston for valuable suggestions regarding the history of archery. We also appreciate comments on the point by A. J. Taylor, T. N. Campbell, Darrell Creel, K. M. Brown, T. R. Hester, Dan Utley, and Anne Fox. Pamela J. Headrick produced the drawing used in Figure 1.

REFERENCES CITED

- Brown, F.
n.d. Annals of Travis County and of the City of Austin. Typescript on file, Austin History Center, Austin, Texas.
- Brown, K. M. and A. J. Taylor
1989 A Comment on Metal Arrow Points. *La Tierra* 16(4):10-22.
- Bulletin (Austin)
1841- Newspaper on microfilm, Barker Texas History Library, The University
1842 of Texas at Austin.
- Chandler, C. K.
1989 A Metal Arrow Point from Terrell County, Texas. *La Tierra* 16(4):23-24.
- Davis, B. O.
1990 Historical Archeology in Austin: A Log House Rescued. *Texas Archeology* (Newsletter of the Texas Archeological Society) 34(1):1, 14-15.
- Elmer, R. P.
1926 Archery. The Penn Publishing Company. Philadelphia.
- Garretson, M. S.
1938 *The American Bison*. New York.
- Jordan, T. G.
1978 *Texas Log Buildings, A Folk Architecture*. University of Texas Press, Austin.
- Lehmer, D. J.
1966 The Fire Heart Creek Site. Smithsonian Institution, River Basin Surveys, Publications in Salvage Archeology No. 1. Lincoln, Nebraska.
- Lehmer, D. J. and D. T. Jones
1968 Arikira Archeology: The Bad River Phase. Smithsonian Institution, River Basin Surveys, Publications in Salvage Archeology No. 7. Lincoln, Nebraska.
- Metcalf, G.
1963 Star Village: A Fortified Historic Arikira Site in Mercer County, North Dakota. Smithsonian Institution, Bureau of American Ethnology, Bulletin 185, River Basin Survey Papers, No. 27, pp 57-122.
- New Orleans Weekly Picayune (New Orleans, Louisiana)
1842 Newspaper on Microfilm, Barker History Library, The University of Texas at Austin.

Northern Standard (Clarksville, Texas)

- 1842- Newspaper on microfilm, Barker History Library, The University of
 1860 Texas at Austin.

Smith, G. H.

- 1968 Big Bend Historic Sites. Smithsonian Institution, River Basin Sur-
 veys, Publications in Salvage Archeology No. 9. Lincoln, Nebraska.

Pope, S. T.

- 1962 Bows and Arrows. University of California Press, Berkeley.

Telegraph and Texas Register (Houston)

- 1840- Newspaper on Microfilm, Barker History Library, The University of
 1860 Texas at Austin.

Texas Sentinel (Austin)

- 1840- Newspaper on microfilm, Barker History Library, The University of
 1841 Texas at Austin.

Thompson, M.

- 1879 The Witchery of Archery. Charles Scribner's Sons, New York.

Wallace, E. and E. A. Hoebel

- 1952 The Comanches, Lords of the South Plains. University of Oklahoma
 Press, Norman.

Winfrey, D. H.

- 1959 Texas Indian Papers, 1825-1843. Texas State Library. Austin.
 1960a Texas Indian Papers, 1844-1845. Texas State Library. Austin.
 1960b Texas Indian Papers, 1846-1859. Texas State Library. Austin.

\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

RECENT PUBLICATIONS

CENTER FOR ARCHAEOLOGICAL RESEARCH
The University of Texas at San Antonio
 San Antonio, Texas 78285

Archaeological Monitoring in Connection with the San Antonio Wastewater Facilities
 Improvements Program, San Antonio, Bexar County, Texas by Anne A. Fox and I. Wayne
 Cox. Archaeological Survey Report No. 194, 1990. 3.00 + .25 tax + 1.50 p/h (\$4.75)

Archaeological Survey of Memorial Park, Leona River Project, Uvalde County, Texas by
 H. Ray Smith. Archaeological Survey Report No. 195, 1990 (2.00 + .17 tax + 1.50 p/h
 (\$3.67)

Historical and Archival Documentation for Pioneer Park, Bexar County, San Antonio,
 Texas by I. Wayne Cox. Archaeological Survey Report No. 196. 2.00 + .17 tax + 1.50
 p/h (\$3.67)

Please enclose check or money order and name and address with your order.

This article reports on several possible Paleo-Indian materials which were probably found on the Johnson farm, located along the Medina River near the Bexar and Medina County line. The collection was brought to our attention by Kathy Johnson, whose grandfather farmed this property for many years, as well as several fields in central Medina County, and collected a number of artifacts from his fields after plowing. It is not absolutely certain from which of his fields these specimens were recovered; thus, they can only be given provenience to the county level (Medina River drainage). In addition to the materials reported here, his collection includes mostly unstemmed triangular forms (Baird, Tortugas, Catan), a large biface, and a few stemmed dart points (Edgewood, Ensor, and a probable Gary).

SPECIMENS

Fluted point - The fluted specimen (see Figure 2, A, A') is presently 71 mm long with a maximum width of 25.6 mm and a maximum thickness of 7.2 mm. The width of the base is uncertain due to one broken basal ear; however, the width at 10 mm above the base is 23.5 mm. The lateral edges appear to be basically parallel, up to this point, and this 23.5 mm measurement should be a good approximation of the original base width. The lateral edges are ground 30 mm up on each side and the unbroken area of the base is also ground. The basal concavity is 3 mm deep in the unbroken area and this appears to be its maximum depth. Both faces are fluted; there are two flake scars on the obverse (shown as Figure 2, A). The second scar overlaps the first and expands both the length and width of the first scar without completely obliterating it. This flute is 25 mm long with a width of about 12 mm. The reverse face (shown as Figure 2, A') has a single flute scar that is 20 mm long and 9 mm wide.

The original flaking appears to be fairly irregular, but this artifact has been resharpened for its upper 40 mm toward the distal end. The flaking of the resharpened area on the obverse face is parallel and oblique parallel (Figure 2, A); flaking on the reverse reworked face is irregular (Figure 2, A').

This specimen is made of a very good quality, glossy brown chert that has been heat treated. This color and quality of chert has been noted in a high percentage of the Paleo-Indian artifacts recovered in the north central part of South Texas (and southern Central Texas).

Lanceolate Fragment -The second specimen (Figure 2, B) is 45 mm long with a maximum width of 19 mm at the center. Maximum thickness is 6.5 mm. The distal tip and both basal corners are broken. The left lateral edge also has a small broken area; these breaks have occurred in recent times, quite probably since it was recovered. The collection was stored and transported in a cigar box without tissue or other padding, and some damage is to be expected.

It is basically lanceolate in outline with an expanding base and concave lateral edges that are heavily ground. The base is thinned from one side, producing a steep bevel and a shallow basal concavity. Flaking is mostly oblique parallel. Color is medium gray. It has been subjected to considerable heat at some point in time, which appears to have darkened its natural lighter gray color and somewhat altered its grainy structure.

Morphologically similar artifacts have been observed in several private artifact collections in the northern part of South Texas. While they have not been documented from excavated sites reported in the literature, they generally occur on sites that also produce identifiable Paleo-Indian points, and probably should also be considered to be of the Late Paleo-Indian period.

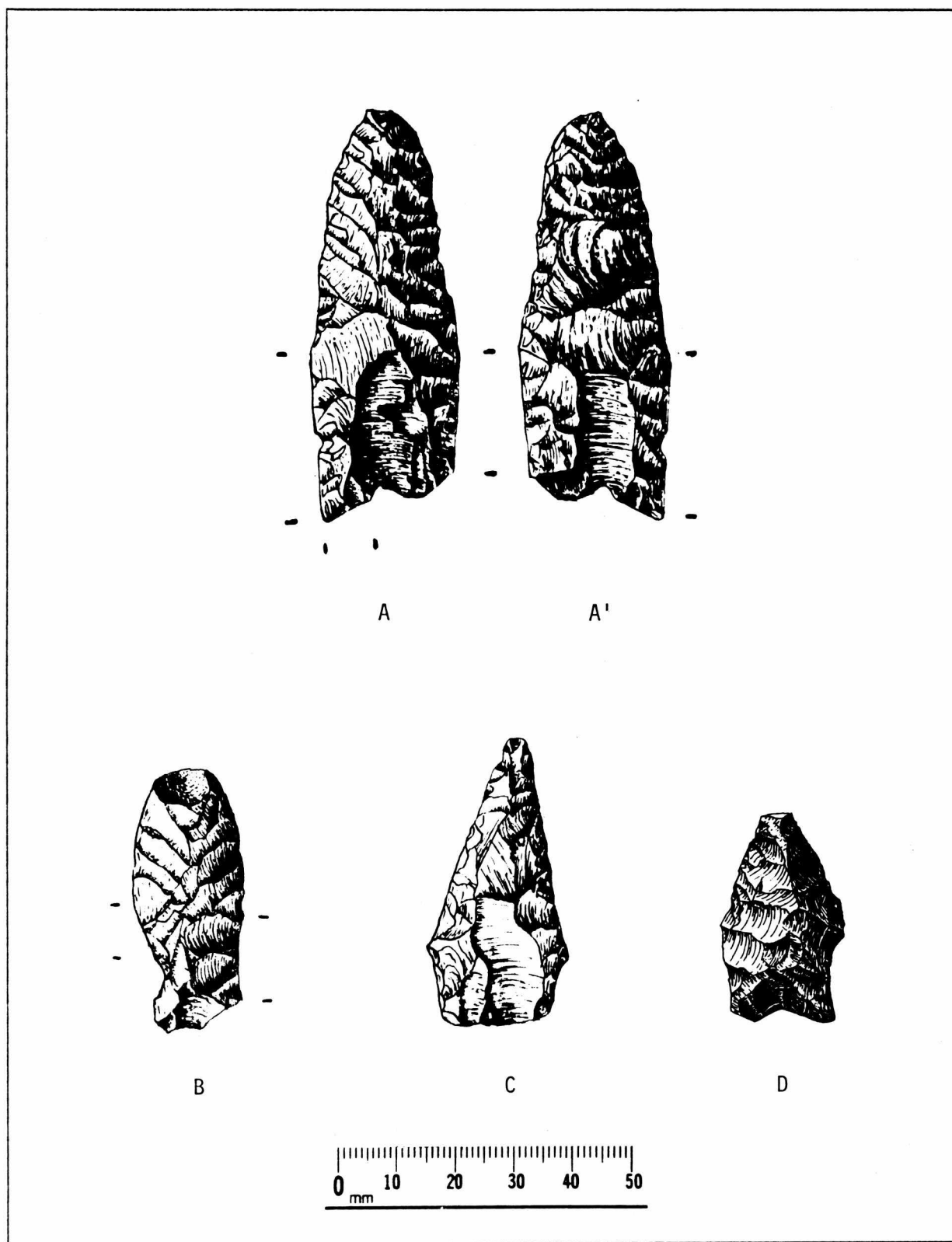


Figure 2. Paleo-Indian and Early Archaic Projectile Points from the Medina River Valley; A-A', Clovis fluted point; B, Lanceolate point; C, Pentagonal point; D, Gower point.

Pentagonal Point - The third specimen (Figure 2, C) is 49 mm long with a maximum width of 24 mm and a thickness of 5.8 mm. Blade edges have been extensively reworked and flaking is irregular. Stem edges are straight and contract to the base which is 18 mm wide. The stem edges and base are lightly ground. The base is thinned on one side with a broad vertical thinning flake that is 22 mm long and 11 mm wide at its maximum extent. It is made of a good quality light tan chert.

This specimen does not fit well in any of the recognized categories of Paleo-Indian artifacts of Texas; however, its edge grinding and basal thinning characteristics suggest it may possibly be a Paleo-Indian point.

Gower - The fourth specimen (Figure 2, D) is 37 mm long with a maximum width of 21 mm. It is 9 mm thick and is coated over all surfaces with a heavy white patina. The base is concave to a depth of 2.5 mm. The base is thinned from one side by the removal of a single flake that produced a steep bevel. The basal concavity is lightly retouched. It is made of a good quality light brown chert which is identifiable under the heavy patina by the scar where the distal tip has been broken.

This specimen is classifiable as a Gower point (Elton Prewitt, personal communication, 28 January 1989). Gower is generally considered to be from the Early Archaic period in southcentral Texas, perhaps as early as 6000 B.C. (Turner and Hester 1985:105). There is, however, some controversy about the type and its dating (Kelly 1979a, 1979b; Hester 1979; Patterson 1979; Shafer 1979).

DISCUSSION

The artifacts documented here are part of a larger collection which includes mostly Archaic forms with a preponderance of triangular forms common in South Texas. The Clovis point is an important specimen. Only one other Clovis point is known from Medina County, as reported in the Texas Clovis Fluted Point Survey (Meltzer 1987:Table 1). Documentation of the Johnson farm Clovis specimen doubles the number of such points known for this county and thus helps to better define the distribution of such fluted projectile points in the region of the state.

The point has been extensively reworked. Meltzer notes that only 12.9 percent of the points in his Texas Clovis survey are reworked, although he notes that this may be an underestimate (Meltzer 1987:49). In this Medina County specimen, the reworked area has parallel and oblique parallel flaking on one face and irregular flaking on the reverse, which is unusual. Irregular flaking in a reworked area might suggest a point had been found and reused by people of a later period (Chandler 1989), but the oblique parallel flaking is more typical of Paleo-Indian workmanship; thus, this particular point was probably reworked during Late Paleo-Indian times. Judge (1974, cited in Meltzer 1987) felt that reworked projectile points were probably multifunctional tools, a thought also put forth by Kelly (1979a, 1983). Meltzer (1987) also observed that reworking is a trait more often seen in areas where good material (flint, chert, etc.) is scarce.

The other specimens documented here are all Late Paleo-Indian or Early Archaic points made from materials which are generally available in this part of the state. Although typical of projectile point styles, lithic raw materials, and workmanship in this area, these previously unreported specimens nonetheless help to document the continuity of early occupations in Medina County along the Medina River. Indeed, this collection suggests that this relatively unstudied area of southcentral Texas may contain some Paleo-Indian and Early Archaic sites which are as yet unrecognized, but which may be worthy of survey and documentation. In any case, these specimens add to our knowledge of the Paleo-Indian peoples of this part of southern Texas.

ACKNOWLEDGEMENTS

Our sincere thanks to Major Kathy Johnson, USAF (now assigned to Wright-Patterson AFB, OH) and the Johnson family of Medina County, for permitting us to study these specimens and the accompanying Archaic materials from Grandfather Johnson's collection. In addition, we greatly appreciate the efforts and artistry of Richard McReynolds who drew the artifact illustrations for this report.

REFERENCES CITED

- Chandler, C. K.
1989 Paleo-Indian Artifacts from the Dan Baker Site (41CM104). *La Tierra* 16(1):7-13.
- Fawcett, W. B., Jr.
1972 The Prehistory of Bexar County: A Study of Previous Work in South Central Texas. *Lower Plains Archeological Society Bulletin* No. 2:23-43.
- Fox, A. A., A. J. McGraw, and Fred Valdez, Jr.
1978 Archaeological Survey and Texting of Pipelines and Confluence Site, San Antonio 201 Wastewater Treatment Project. Center for Archaeological Research, the University of Texas at San Antonio, Archaeological Survey Report 66.
- Graves, Carol, and Lynn Highley
1978 41ME7: A Cave Site in Medina County, Texas. *La Tierra* 5(2):10-19.
- Hester, Thomas R.
1979 Notes on Gower, Jetta, and Other Projectile Points of the Pre-Archaic Period in Texas. *La Tierra* 6(3):5-8.
- Kelly, Thomas C.
1979a Gower Projectile Points? *La Tierra* 6(2):13-19.
1979b Comments on Patterson's, Hester's, and Shafer's Comments. *La Tierra* 6(3):11.
1983 The Brom Cooper Paleo-Indian Collection from McMullen County, Texas. *La Tierra* 10(3):17-40.
- McGraw, A. J.
1977 A Preliminary Archaeological Survey Along the Medio Creek Drainage, Southwestern Bexar County, Texas. Center for Archaeological Research, the University of Texas at San Antonio, Regional Studies No. 3.
- McReynolds, Richard
1982 Marine Shell Artifacts from Southwest Bexar County. *La Tierra* 9(4):13-16.
- McReynolds, Richard L., Ben McReynolds, and Mike McReynolds
1979 Additional Paleo-Indian Artifacts from San Miguel Creek, Atascosa County, Texas. *La Tierra* 6(2):20-25.

- McReynolds, Richard L., Ben McReynolds, and Mike McReynolds (Continued)
 1980 Additional Late Paleo-Indian Artifacts from Southwestern Atascosa County, Texas. *La Tierra* 7(3):34-38.
- Meltzer, D. J.
 1987 The Clovis Paleo-Indian Occupation of Texas: Results of the Texas Clovis Fluted Point Survey. *Bulletin of the Texas Archeological Society* 57 (for 1986):27-68.
- Mitchell, Jimmy L.
 1978 The Turtle Creek Phase: An Initial Late Prehistoric Component in South Texas. *La Tierra* 5(4):32-43.
- Patterson, L. W.
 1979 An Alternate Explanation of Edge Damage on Gower Points. *La Tierra* 6(3):3-4.
- Shafer, Harry J.
 1979 Comments on Kelly's "Gower Projectile Points?" Article. *La Tierra* 6(3):9-10.
- Turner, E. S. and T. R. Hester
 1985 A Field Guide to Stone Artifacts of Texas Indians. Texas Monthly Press, Austin.
- Valdez, Fred, Jr.
 1979 A Summary of Recent Survey and Testing Activities in Southern Bexar County, Texas. *La Tierra* 6(1):3-10.

§ §

ATTENTION WRITERS !

I am pleased and impressed with the interest shown, and the quality of reports sent to me for publication in *La Tierra*. Your manuscripts are well written and full of valuable information to hold the interest of the readers. However, I would like to remind you to refer to the last page of this issue of *La Tierra*, -- INFORMATION FOR CONTRIBUTORS -- paragraph two. In this age of computers and typewriters I'm happy to say that you all take advantage of either method of printing. But, some of you forget to double-space your copy. There is a very good reason for this format; I need the extra space to make corrections. The double-space style saves time for me as well as for Shirley Van der Veer, our capable Production Manager.

Thanks for your archaeological interest. Keep those manuscripts coming!

Evelyn Lewis
 Editor

INTERACTIONS BETWEEN INDIANS OF THE SOUTHERN PLAINS AND THE SOUTHEAST WOODLANDS

Leland W. Patterson

ABSTRACT

Interactions between Indians groups using technological traditions of the Southern Plains and the Southeastern Woodlands is discussed, using Southeast Texas as a study area. Interpretive models are presented as alternates to some of L. Johnson's conclusions on this subject.

INTRODUCTION

Johnson (1989) has discussed the movements of Late Paleo-Indian groups from the Southern Plains into the western edge of the Southeastern Woodlands. He seems to support the position that these movements were, at least sometimes, caused by climatic stress in the Southern Plains region. This article presents a different model for the interaction of Indians of adjacent areas of the Southern Plains and Southeastern Woodlands, based on comparisons and distributions of technological traditions in Southeast Texas. The study area is shown in Figure 1. Southeast Texas is an interface area for Southern Plains and Eastern Woodland technological traditions.

The model presented here stresses the normal movements of nomadic hunter-gatherer groups, and the persistence of a technological transition zone in western Southeast Texas throughout all prehistoric time periods. There does not seem to be anything unique about the movements of Late Paleo-Indian groups from Central Texas into the woodland-coastal prairie area of western Southeast Texas as the same type of movement occurred in all later prehistoric time periods. Borders of different technological traditions and ecological regions are seldom rigid (Patterson 1988).

It is shown here that the area between the Colorado and Brazos Rivers in Southeast Texas functioned as the main interaction zone for Indians of Central and Southeast Texas in all prehistoric time periods. This geographic area has abundant natural food resources that would have attracted hunting and gathering groups from adjacent areas.

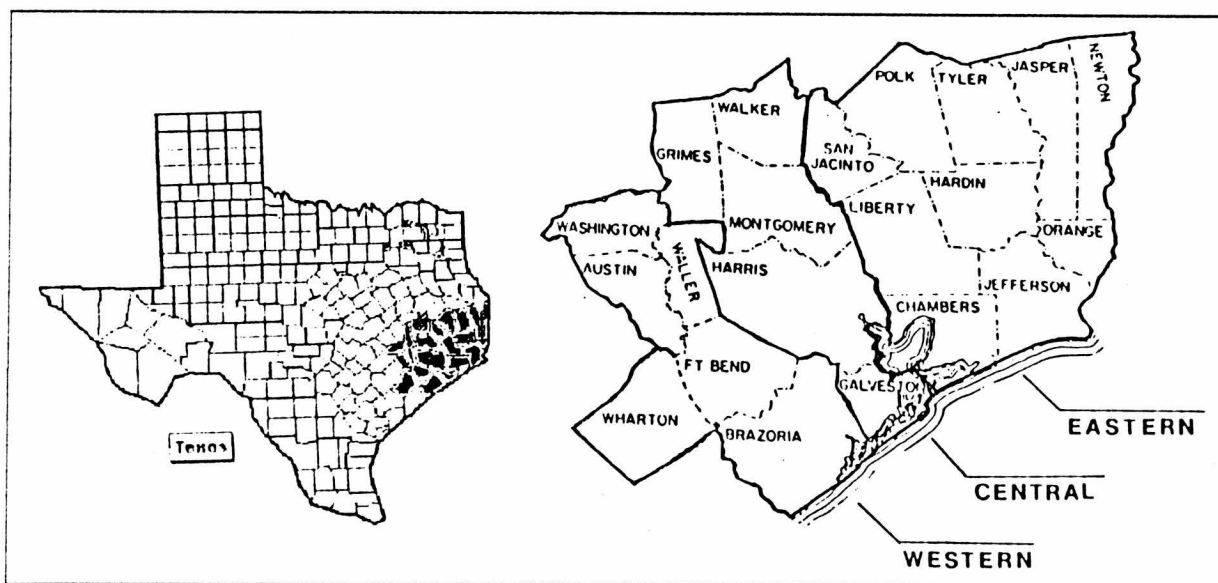


Figure 1. Southeast Texas study area.

It is also noted that Central and Southeast Texas maintained a series of separate technological traditions throughout all prehistoric time periods, possibly because of adaptations to different ecological zones.

LATE PALEO-INDIAN TECHNOLOGICAL TRADITIONS

The definitions of Late Paleo-Indian technological traditions are based mainly on projectile point types. The principal Late Paleo-Indian point types of Central Texas representing Southern Plains traditions include Plainview, Golondrina, Angostura, Meserve and Scottsbluff. As Johnson (1989:5) has noted, these point types can overlap in time and represent concurrent ethnic groups. The Late Paleo-Indian time period in Texas is generally defined as starting at about 10,000 years ago and ending 8,000 to 7,000 years ago. This definition is mostly based on the duration of the general Plano lanceolate point technological tradition group. As Johnson (1989:19) notes, there are also Dalton-like and San Patrice points found in Central Texas that represent technological traditions of the Southeastern Woodlands, so that interactions between Indians of the Southern Plains and Southeastern Woodlands occurred in both east and west directions.

In Southeast Texas, and extending farther west as well as farther east, Early Notched is the earliest projectile point type other than Clovis. In Bee County, Early Notched points were found at an excavated level below a Folsom point (Sellards 1940). In Wharton County, an Early Notched point was found at the same excavation level as a Folsom point (Patterson and Hudgins 1985:Figure 5). The Folsom time period is about 11,000 to 10,000 years B.P. There are many sites published for Southeast Texas that have Early Notched points with ground basal edges, but only one Folsom point has been published for this region. It appears that the manufacture of Early Notched points started sometime before 10,000 years ago, concurrent with Folsom points in the Southern Plains, and either concurrent with, or immediately following, the Clovis point type (Patterson n.d.,a). Early Notched points have been found as far west as the Trans-Pecos area (Shafer 1977) and throughout eastern Texas including locations in the eastern part of Central Texas (Patterson n.d.,a).

Sometime during the Late Paleo-Indian time period the San Patrice point type was introduced to Southeast Texas. Both Early Notched and San Patrice points have wide distributions in the Southeastern Woodlands during the Late Paleo-Indian period. These two point types have been found together at sites in Texas (Patterson and Hudgins 1985) and Louisiana (Webb et al. 1971). The data base for published sites in Southeast Texas shows 12 sites with both San Patrice and Early Notched points, 22 sites with San Patrice only, and 13 sites with Early Notched only (Patterson 1989). Early Notched and San Patrice should be regarded as separate Late Paleo-Indian traditions because of differences in geographic distributions and separate occurrences, even though these two point types can be found together at some sites. Ensor (1986) and Justice (1987) place the San Patrice point in the general Dalton technological tradition, but Early Notched points fall into another tradition because of distinctive morphological features as well as differences in occurrence.

Early straight-stem dart points with ground basal edges were a minor point type in the Late Paleo-Indian period in Southeast Texas, as shown by excavations in Harris (Patterson 1980) and Wharton (Patterson et al. 1987) Counties. A mixture of straight-stem dart point types then became predominant in the Early Archaic period.

Some sites in Wharton County also have what appear to be fairly local point styles during the Late Paleo-Indian period. One example of this is a fishtail base dart point at sites 41WH2 (Patterson and Hudgins 1980:Figure 4,G) and 41WH19 (Patterson et al. 1987:Figure 10, J,K).

INTERACTION OF LATE PALEO-INDIAN GROUPS

It has previously been noted (Patterson 1983:Table 1) that there are significant quantities of Late Paleo-Indian points in Southeast Texas that represent Southern Plains traditions coming from Central Texas. These point types include Plainview and Angostura as major types, and Meserve and Scottsbluff as minor types. As shown in Table 1, both Plainview and Angostura points have decreasing concentration gradients from west to east in Southeast Texas. Scottsbluff and Meserve points are not common in any part of Southeast Texas (Patterson 1989, n.d.,b:Table 4). In Southeast Texas there are only four published sites with Scottsbluff points and a few unpublished examples (Johnson 1989:Table 3). Since many Scottsbluff points have been found along the Red River (Johnson 1989:37), compared to a few specimens in Southeast Texas, there appears to be a decreasing concentration gradient from north to south for this point type, along the western edge of the Southeastern Woodlands.

TABLE 1. Late Paleo-Indian Points in Southeast Texas.

Point Type	Western		Central		Eastern		Total	
	No.of Points	No.of Sites	No.of Points	No.of Sites	No.of Points	No.of Sites	No.of Points	No.of Sites
Plainview	28	13	28	9	0	0	56	22
Early Notched	41	9	35	12	3	2	79	23
Early Stemmed	11	3	6	3	0	0	17	6
San Patrice	15	5	48	17	42	12	105	34
Angostura	10	7	10	8	1	1	21	16
Scottsbluff	2	2	1	1	1	1	4	4
Meserve	1	1	3	2	1	1	5	4

Conversely, the San Patrice point type, representing a Southeastern Woodlands Late Paleo-Indian tradition, has a decreasing concentration gradient from east to west in Southeast Texas, as shown in Table 1 (Patterson n.d.,b:Table 4). Both Early Notched and Early Stemmed point types have a decreasing concentration gradient from west to east in Southeast Texas (Table 1), but this is probably more apparent than real. Until recently, Early Notched and Early Stemmed point types have not been well recognized, and both types probably represent Southeastern Woodlands traditions.

The western portion of Southeast Texas was a zone of interaction between groups representing Southern Plains and Southeastern Woodlands technological traditions during the Late Paleo-Indian period. This is the southern portion of Johnson's (1989) study area of eastern Texas and eastern Oklahoma for interaction of Late Paleo-Indian groups of the two regional technological traditions.

PERSISTENCE OF INTERACTION ZONE IN SOUTHEAST TEXAS

While Johnson's (1989) study was limited to interactions of Indian groups during the Late Paleo-Indian period, it should be noted that Southeast Texas functioned as an interface for technological traditions of the Southern Plains and Southeastern Woodlands throughout all prehistoric time periods. In Early and Middle Archaic periods, Central Texas point types found mainly in the western part of Southeast Texas include Bell, Bulverde and Pedernales. In the Late

Archaic and Early Ceramic periods, Central Texas point types found in Southeast Texas include Ensor, Travis, Marcos and Fairland. In the Late Prehistoric period, the Scallorn arrow point of Central Texas is found in Southeast Texas. During all time periods, most Central Texas point types have decreasing concentration gradients from west to east in Southeast Texas (Patterson n.d.,b.:Tables 4,5).

GENERAL DISCUSSION

Johnson (1989) has published a well-constructed report on movements of Late Paleo-Indian groups from the Southern Plains into the western edge of the Southeastern Woodlands. Some of the conclusions in Johnson's explanatory models can be questioned, however. It is generally desirable to consider alternate explanatory models in archaeology. Johnson's report is a healthy sign that more data are now available to study the movements of prehistoric hunter-gatherer groups.

In Johnson's explanatory models, climatic change and the unpredictable movements of bison are mentioned as possible reasons for intrusions of Late Paleo-Indian groups from the Southern Plains into the western edge of the Southeastern Woodlands. An even more general interpretation can be given, however, on the reasons for these movements. The boundaries of technological traditions and ecological zones are seldom rigid for nomadic peoples. There is nothing unique about the interaction between adjacent nomadic hunter-gatherer groups, but interaction is easier to detect when different technological traditions are present. Further, a technological interface zone between the Southern Plains and the Southeastern Woodlands is not unique to the Paleo-Indian period, since an interface zone of this type existed in Southeast Texas during all prehistoric time periods. There is even evidence that Indian groups from adjacent geographic areas, including the southeastern portion of Central Texas, gathered at specific sites in Wharton County (Patterson and Hudgins n.d., a,b,c) during the Late Prehistoric and Historic Indian periods. Even though the Indians of the southeastern portion of Southeast Texas generally shared the technological traditions of the Southern Plains, their lifeway may have been similar to the Indians of adjacent Southeast Texas who used technological traditions more representative of the Southeastern Woodlands. The ecology along the Colorado River in the southeastern portion of Central Texas, southeast of Austin, is not all that different from the ecology farther south in the western part of Southeast Texas.

The use of the "packing" concept by Johnson (1989:51) to explain interactions of groups from different ecological zones may be somewhat tenuous. There were considerable differences in population levels during different time periods in Southeast Texas (Patterson 1986, n.d.,b), but the mixing of technological traditions in the western part of this region remained fairly constant for the various prehistoric time periods.

Johnson (1989) did not consider the Texas Angostura point type when discussing the Agate Basin tradition. The Angostura point type seems to fall under the general Agate Basin tradition, as noted by Justice (1987:34).

The distinction made by Johnson (1989:44) for manufacturing dart points from true blades or bifacial preforms does not seem to be well supported from a technological basis. All dart points were manufactured from bifacial preforms, most often made from flake blanks. Flake blanks can be true prismatic blades, blade-like flakes, or irregular flakes. True prismatic blades with prominent dorsal ridges are not the best type of flake blank for making bifacial preforms. This is because of difficulty in removing the ridges during thinning and because uniform true prismatic blades are more subject to end-shock fracture failure than irregular shaped flakes. Although there are Paleo-Indian sites in Texas with large true prismatic blades, there is little evidence that this flake type was preferred for the manufacture of bifacial projectile points. At site 41ME3 (Patterson 1977) in Medina County, large prismatic blades were used mainly to make unifacial tools.

Johnson (1989:5) makes an important point that various types of Late Paleo-Indian points in an area may represent concurrent movement of different groups, rather than different point types representing different time periods. Many archaeologists would like to see each projectile point type represent a different time period as a convenient chronological marker, but this is seldom realistic when adjacent time periods are involved.

SUMMARY

Data are becoming increasingly available to permit more detailed studies of the movements of prehistoric hunter-gatherer groups in North America. Johnson's (1989) study of the interaction of Late Paleo-Indian groups of the Southern Plains and Southeastern Woodlands is a good example of this. This article has given some alternate interpretations that should be considered regarding some of Johnson's conclusions. In general, however, Johnson's report is an excellent example of a detailed study on this subject.

REFERENCES CITED

- Ensor, H. B.
1986 San Patrice and Dalton Affinities on the Central and Western Coastal Plain. *Bulletin of the Texas Archeological Society* 57:69-81.
- Johnson, L., Jr.
1989 Great Plains Interlopers in the Eastern Woodlands During Late Paleo-Indian Times. *Texas Historical Commission, Office of the State Archeologist, Report* 36.
- Justice, N. D.
1987 *Stone Age Spear and Arrow Points of the Midcontinental and Eastern United States*. Indiana University Press.
- Patterson, L. W.
1977 A Discussion of Possible Asiatic Influences on Texas Pleistocene Lithic Technology. *Bulletin of the Texas Archeological Society* 48:27-45.
- 1980 The Owen Site, 41 HR 315: A Long Occupation Sequence in Harris County, Texas. *Houston Archeological Society, Report* No. 3.
- 1983 Prehistoric Settlement and Technological Patterns in Southeast Texas. *Bulletin of the Texas Archeological Society* 54:253-269.
- 1986 Prehistoric Population Dynamics of Southeast Texas. *Bulletin of the Texas Archeological Society* 57:117-121.
- 1988 Technological Interactions in Central and Southeast Texas. *Houston Archeological Society Journal* 90:18-22.
- 1989 A Data Base for Inland Southeast Texas Archeology. *Houston Archeological Society, Report* No. 6.
- n.d.,a Early Notched Points in Texas. *Current Research on the Pleistocene*, Vol. 6, in press.
- n.d.,b The Archeology of Inland Southeast Texas: A Quantitative Study. Submitted to the *Bulletin of the Texas Archeological Society*.

Patterson, L. W. and J. D. Hudgins

1980 Preceramic Sites 41 WH 2 and 41 WH 7. *Houston Archeological Society Newsletter* 66:34-39.

1985 Paleoindian Occupations in Wharton County, Texas. *Bulletin of the Texas Archeological Society* 56:155-170.

n.d.,a Site 41 WH 74, Wharton County, Texas. Submitted to the *Houston Archeological Society Journal*.

n.d.,b Indian Component of Site 41 WH 40, Wharton County, Texas. Submitted to the *Houston Archeological Society Journal*.

n.d.,c Excavations at Site 41 WH 12, Wharton County, Texas. Submitted to the *Houston Archeological Society Journal*.

Patterson, L. W., J. D. Hudgins, R. L. Gregg and W. L. McClure

1987 Excavations at Site 41 WH 19, Wharton County, Texas. *Houston Archeological Society, Report No. 4*.

Sellards, E. H.

1940 Pleistocene Artifacts and Associated Fossils from Bee County, Texas. *Bulletin of the Geological Society of America* 51:1628-1657.

Shafer, H. J.

1977 Early Lithic Assemblages in Eastern Texas. In: E. Johnson (ed.), *Paleoindian Lifeways, The Museum Journal* 17:187-197. Texas Tech University, Lubbock.

Webb, C. H., J. L. Shiner and E. W. Roberts

1971 The John Pearce Site (16 CD 56): A San Patrice Site in Caddo Parish, Louisiana. *Bulletin of the Texas Archeological Society* 42:1-49.

\$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$ \$

MORE RECENT PUBLICATIONS!

CENTER FOR ARCHAEOLOGICAL RESEARCH *The University of Texas at San Antonio* *San Antonio, Texas 78285*

Field Survey and Archival Research for the Rosillo Creek Battleground Area, Southeast San Antonio, Texas, by I. Wayne Cox, with an Appendix by Dora Guerra. Archaeological Survey Report No. 177, 1990. \$4.00 + \$.33 tax + \$1.50 p/h (\$5.83)

Property Ownership and Monitoring for the Modification of Martin and Bowie Streets, San Antonio, Bexar County, Texas, by I. Wayne Cox. Archaeological Survey Report No. 185, 1990. \$3.00 + \$.25 tax + \$.1.50 p/h (\$4.75)

Investigations at the Vollrath Blacksmith Shop (41 BX 786), San Antonio, Bexar County, Texas, by I. Wayne Cox, Maureen J. Brown, Jon Hageman, and Clinton McKenzie. Archaeological Survey Report No. 188, 1990. \$6.00 + \$.50 tax + \$1.50 p/h (\$8.00)

Archaeological Survey for Proposed Landfill Expansion (Phase I), City of Del Rio, Val Verde County, Texas, by Ronald W. Burkett. Archaeological Survey Report No. 193, 1990. \$2.00 + \$.17 tax + \$1.50 p/h (3.67)

Please enclose check or money order with name and address with your order.

**POSSIBLE ALMAGRE POINTS
FROM THE PANTHER SPRINGS CREEK SITES, BEXAR COUNTY, TEXAS**

Richard E. Townsend, Jr.

ABSTRACT

Possible Almagre projectile points from the Panther Springs Creek sites are described and discussed in this report. It is also speculated that these points are a true type and not a preform.

INTRODUCTION

In 1981 the author began work at the now well known Panther Springs Creek sites. In those days it was commonly called the Walker Ranch. The time spent there consisted of a four-phase effort to collect and salvage as much information and artifacts as possible. After eight years of dedicated field work and great inspiration from the Field Guide (Turner and Hester 1985), it is now time to report on the work carried out there.

THE SITE

The Walker Ranch sites were located in north Bexar County in a zone that has dropped in elevation from the higher Balcones Escarpment. Most of the sites were situated in a basin formed by Panther Creek, appearing much like a small valley. In the central area of habitation there were three main springs that flowed into the stream. Not far to the southeast Panther Creek empties into Salado Creek (Figure 1).

Today the terrain that surrounds the Walker Ranch sites still possesses all the necessities to sustain a stable Indian way of life. No doubt this was also true during prehistoric times. The springs probably flowed on a regular basis, supplying an essential source of water. Enough evidence has been uncovered at the Walker Ranch sites to show intense occupation from the Late Paleo-Indian period, up until the Late Prehistoric. At one time the sites were possibly one of the most populated and continuously inhabited spots in Bexar County. Now the sites have been obliterated to make way for a large earthen dam and a small lake.

Due to the large area of occupation at the Walker Ranch sites, it was necessary to devise a way of keeping track of the location of all campsites and related material. This was achieved by first establishing basic areas of occupation. At this section of Panther Creek there were nine major, or basic, areas of habitation.

These areas were defined by natural features of the land, such as, spring beds, a rise in elevation, or even soil changes. These were designated areas A, B, C, D, D2, E, F, G and O.

The following dimensions were based on a point in the middle of the creek and facing north; to the left were areas C, E, G and O. Most of the left side was area C, with E at the northern portion. Towards the west, and out of the immediate basin, was area O. Area G was the farthest from the creek and the highest area in elevation.

Back to the right, and starting from the south to the north in order, were areas A, B, D, D2 and F. All of the campsites on this side of the creek were confined to the lower elevations of the valley.

Most of these large areas were subdivided both vertically and horizontally into smaller sections of land. Campsites were numbered in order of discovery in their respective major area.



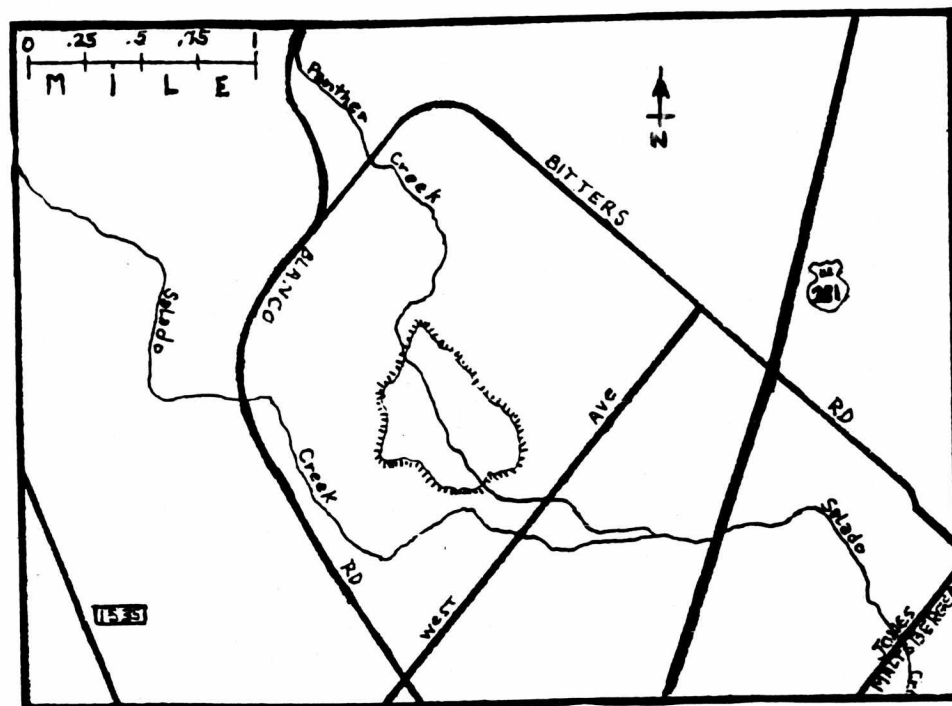


Figure 1. Partial map of northern San Antonio showing major roadways surrounding the Walker Ranch sites. The dashed in area near the center of the map indicates the approximate location of areas A, B, C, D, D2, E, F, O. Toward the southeast Panther Creek drains into Salado Creek.

PROCEDURE

The work at the Walker Ranch was a four-phase endeavor. Phase 1 was surface studies of ancient campsites; Phase 2 followed with excavation of specific sites; Phase 3 was a pseudo type of salvage archaeology in that there was no coordinated effort between the contractor's tractor and one's personal research. Rather it was simply taking advantage of the situation, to salvage from their destruction as much as one could. It also helped to be in the right place at the right time. Phase 4 was back to the surface, not so much to study campsites as to analyze soil types.

There was a unique quality about the various strata at the Walker Ranch sites. During Phase 2 work one became well acquainted with these soil types and their relationship in time, based on the lithic material it contained. In Phase 3 this knowledge was finely tuned. By Phase 4 this information would be used to discern between artifacts and the disturbed soil in which they were now found.

Overall, the different strata corresponded to the cultural patterns that we designate Early Archaic, Middle Archaic, and so on. This fact was not without variations, but this theme was consistent from one area to the next.

THE ARTIFACTS

Figure 2. [Key to Four-Letter Code: ABML=Area B, middle left; ABMM=Area B, middle middle; ACLL=Area C, low left; ACLM=Area C, low middle; ACLR=Area C, low right; ADHM=Area D, high middle; ADLM=Area D, low middle.]

- A. Fire-spalled, fairly intact, initial find from ACLM, Camp 3, Phase 3. Wt., 22 grams.

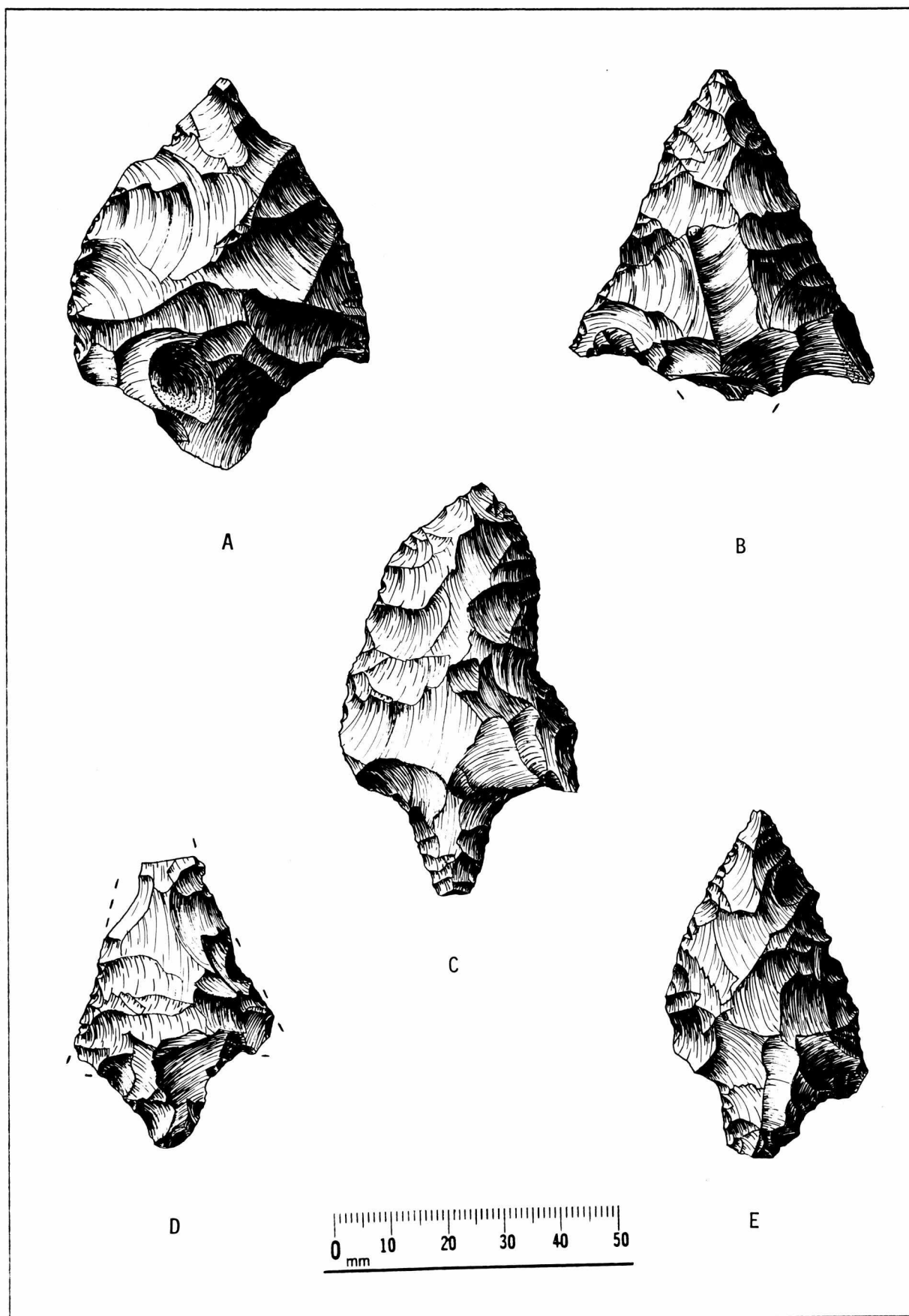


Figure 2. First five possible Almagre points from Panther Springs Creek Sites.

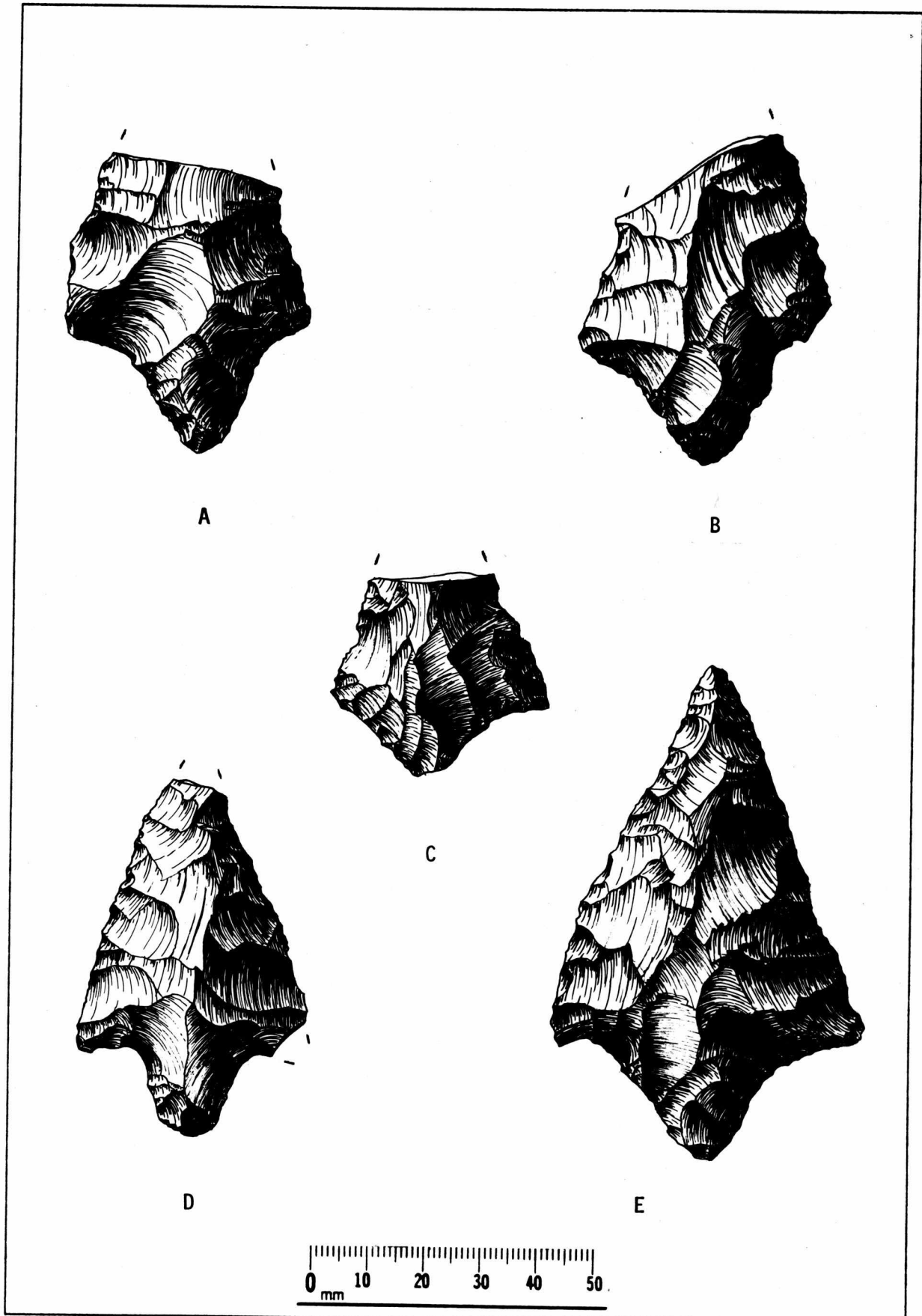


Figure 3. Last Five possible Almagre points from Panther Springs Creek Sites.

- B. Ancient breakage of stem, from ACLM, Camp 3, Phase 3.
- C. All damage is ancient, stem is noticeable, almost drill-like, from ACLR, Camp 8, Phase 3. Wt., 21 grams.
- D. Fresh damage to shoulder and blade edge, from ADLM, Camp 5, Phase 3.
- E. Whole specimen, thick and crude, excavated from ACLL, Camp 1b, during phase 2. Wt., 20 grams.

Figure 3.

- A, B, and C. All are lower portions of projectile points, damage is ancient. These are random surface finds not associated with any particular campsite. Recovered from ABML and ABMM, during Phase 4.
- D. Fresh damage to shoulder and tip, from ADHM random surface in association with Specimen E (Figure 3) and same soil, Phase 4. Wt., 15 grams.
- E. Slight damage, largest specimen of this type, found at ADHM random surface, but same soil as Specimen D (Figure 3), Phase 4. Wt., 35 grams.

SPECIAL STUDIES

It is imperative to give more detail concerning the soil and other features associated with the artifacts in this report. Since this information is available, it is important to share it.

Under the title of Special Studies, the opportunity presented itself to give more detail to each campsite and its consistency. Primarily the following descriptions are directed to the level from which the Almagre points were recovered.

Campsite No. 3, located in Area C, low, middle or ACLM. Burned rock midden, grey ash colored soil, soft texture. Heavy concentration of smooth and rough, burned limestone nodules. Specimens A and B (Figure 2) were found in this level. These specimens were one of the earliest point types from this site.

Campsite No. 8, located at Area C, low right or ACLR. Medium colored grey soil, soft to slightly hard texture averaging six to eight inches thick. Thin layer of small burned limestone nodules near top, points found near bottom. Light to medium amount of snail shells were present. Level corresponds to the Middle Archaic period. Specimen C (Figure 2) was found in this level. This was a major site from Late Paleo to Late Archaic, heavily used during Early and Middle Archaic periods.

Campsite No. 5, Located at Area D, low middle or ADLM. Burned rock midden, grey ash colored soil, soft to slightly hard texture. Large amount of smooth burned limestone nodules. Light amount of snail shells present. Specimen D (Figure 2) was found there. The site was well used during Early and Middle Archaic periods. This site was similar to Campsite No. 3 ACLM, on the other side of the creek.

Campsite No. 1b, located at Area C, low left or ACLL. Twelve inch thick layer of slightly hard soil. Light tan colored near top graduating down to a dark pink with no disruptions. Medium amount of snail shells were present. Specimen E (Figure 2) was found 3/4 (9 inches) down in this layer. Since this level was on a slope it was hard to date, but close to Early Archaic. Site not used much, but later Pedernales were first points discovered there.

Campsite No. ?. Specimens D and E (Figure 3) were recovered from identical soil. This dirt was removed from an unknown area and then spread over a spot at Area D, high middle or ADHM. Soil was light grey in color, with a soft texture. Light amount of snail shells and burned limestone nodules present. This was typical Middle Archaic soil. Even though these points and soil are not associated with any known campsite, they probably do represent one.

COMMENTS

Since the first specimen turned up in 1983 it has always appeared that these possible Almagre projectile points were a genuine cultural entity. From the evidence at the Walker Ranch sites, it must be pointed out that no connection was made between these Almagre points and anything similar. They were never found in context with a point type for which they could be considered a preform.

It must also be stressed that the distribution of these points adds to their identity, as recorded at the Walker Ranch sites. Under Special Studies there are descriptions of four, probably five campsites. This number of campsites is in an amount, or ratio, that relates to the number of artifacts recovered. This writer did not recover all specimens at each site, and there are other specimens not mentioned in this report. Still the proportion of the sites and artifacts is an important clue to this report.

Almagre points are not as common as the longer existing multitude of Nolans, Pedernales, Montells and Marcos point types. Yet they are not as rare as the Andice, Rio Grande or Carrizo type points.

Although not the oldest, these Almagre points are some of the oldest contracting stemmed, strong-shouldered to barbed point types found at the Walker Ranch sites.

All these opinions are based solely on the author's interpretation of his work at the Walker Ranch sites.

ACKNOWLEDGEMENTS

The author would like to thank his wife, Illine J. Townsend, for typing and editing of this report.

REFERENCES CITED

- Turner, Ellen Sue and Thomas R. Hester
1985 A Field Guide to Stone Artifacts of Texas Indians. Texas Monthly Press, Austin.

AUTHORS

C. K. CHANDLER, current Secretary and also Documentation Chairman of STAA, is a retired railroad management official and engineering consultant with an insatiable interest in Texas archaeology. He is Past President of the Texas Archeological Society and a member of the Coastal Bend Archeological Society. C. K. was the 1985 Robert F. Heizer Award winner for his extensive work in south Texas archaeology (see Vol. 13, No. 1). Also, in 1985 he recorded more archaeological sites with the Texas Archeological Research Laboratory (TARL) than any other individual. C. K. is a valued contributor of manuscripts to *La Tierra* and the *Bulletin of the Texas Archeological Society*, covering such varied subjects as metal points, rock art, and hearthfield sites in Terrell County. He has been honored by being named a TAS Fellow, and was also appointed as a steward for the Office of the State Archeologist. The Chandlers reside in northern San Antonio.

KAREN S. COLLINS is a self-employed research consultant in Austin and has long focused on early Texas history. She holds B.A. and M.A. degrees in History from the University of Texas (Austin).

MICHAEL B. COLLINS is a Research Fellow at the Texas Archeological Research Laboratory at the University of Texas at Austin. His current research interests include prehistory of the Americas, particularly Texas, geological archaeology, lithic technology, and ethnohistory. He holds B.A. and M.A. degrees from the University of Texas (Austin) and a PhD from the University of Arizona (Tucson).

MALCOM L. JOHNSON grew up in Corpus Christi, Texas and became interested in collecting artifacts and local historical lore at an early age. While in Corpus he was employed by Humble Oil Company, Sunray DX Oil Company, and Tenneco Oil Company, in their Exploration Departments as a draftsman. In January, 1967, he organized and served as the first President of the Coastal Bend Archeological Society, Corpus Christi. After moving to Fredericksburg, Malcom became involved with the local "Rockhounds" and served as Show Chairman of the Fredericksburg Gem and Mineral Show. He is also a member and past Chairman of the Gillespie County Historical Commission, and in 1984 received an "Award of Merit" from the Gillespie County Historical Society for his research into the Fredericksburg and Northern Railway, and for his archeological work as well. Along the way he became involved with the Hill Country Fruit Council and the Travis County Farmers Market Steering Committee, as well as a peach grower. The family name, dating back to 1805, qualifies Malcom to be a member of the Sons of the Republic of Texas and the Sons of the American Revolution. He is a member and past-Chairman of STAA, a member of TAS, and is now a Steward for the Office of the State Archeologist.

LTC. JIMMY L. MITCHELL is a behavioral scientist with McDonnell-Douglas Astronautics Company. He holds a PhD in I/O Psychology from Purdue University and is a retired U. S. Air Force Lt. Colonel. He is the author of a number of publications, including many papers on the archaeology of South Texas and the Texas Panhandle. He is a Steward for Bexar County with the Office of the State Archeologist, and is the editor of the Bulletin of the Texas Archeological Society.

LELAND W. PATTERSON is a retired chemical engineer whose last professional position was as Manager of Environmental Affairs, Engineering for Tenneco, Inc. His work included cultural resource studies for environmental impact studies and the general overview of any archaeological work required. He has published over 235 articles and reports in local, state, regional and national journals such as *American Antiquity*, *Plains Anthropologist*, *Journal of Field Archaeology* and *Bulletin of the Texas Archeological Society*. He is a member of several archaeological societies and has served as a member of the American Institute of Archaeology Committee for American Archaeology. Because of his untiring efforts to conduct surveys, record over 150 prehistoric sites in Texas, Louisiana and Ohio, and publish his findings, Patterson has received the Golden Pen award from the Texas Archeological Society.

RICHARD E. TOWNSEND, JR is a lifelong resident of San Antonio, and is employed with a local general contractor. He has been interested in Texas Indians since childhood, and after conducting his first dig at the age of nine, has been hooked on archaeology ever since. Richard is an avocational archaeologist who has pursued his interests throughout San Antonio, South Texas, and the Trans-Pecos, for over thirty years. He is a new member of STAA and has offered to share his archaeological experience in this issue of *La Tierra*.

§ § § § § § § § § § § § § § § §

TEXAS ARCHEOLOGICAL SOCIETY

Highly respected annual Bulletin of the Texas Archeological Society; Newsletter, Texas Archeology; one week summer field school; fall convention. Write to:

Texas Archeological Society
Center for Archaeological Research
The University of Texas at San Antonio
San Antonio, Texas 78285

INFORMATION FOR CONTRIBUTORS

La Tierra publishes original papers and selected reprints of articles involving the historic and prehistoric archaeology of southern Texas and adjacent regions. Original manuscripts are preferred. Articles involving archaeological techniques, methods, and theories are also considered.

Articles may be submitted in any form, although double-spaced typed copy is naturally preferred. However, we will review and work with material in any form to encourage those not comfortable with typewritten or other formal methods; we are more concerned that you submit your ideas and document your materials than the form of materials with which we have to work.

Figure 1 of any manuscript should be a county or regional map to show the location of your sites. If you choose not to disclose the specific location of the site, show at least the county with its major river or creek drainages. A small Texas map showing the location of the county in Texas will be added, to provide our readers, who are not familiar with the area, some idea of the general location. Other figures can be line drawings or photographs; line drawings are preferred if they are good quality, since every photograph used costs an extra \$50-\$60 for a metal plate and set-up charges. If you need assistance with illustrations, please let us know--there are several STAA members who have volunteered to help with illustrations. For examples of good artifact and map illustrations, see those by Richard McReynolds and Ken Brown in previous issues.

All figures should contain an appropriate caption and, where necessary, identification of each specimen (a, b, etc. or 1, 2, etc.) to aid referencing individual specimens in the text. The suggested procedure is to photocopy your original drawing and write in captions and identification letters on the photocopy. This saves the original for our use in final preparation of camera-ready copy.

Citations of references should be embodied in the text, giving the author, date, and page (e.g., Hester 1980:33). All references cited should be included in a References list using normal archaeological form (see articles in this issue for examples). The Reference list should not include publications not referred to in the text. Personal communications are cited in the text (e.g., Anne Fox, personal communication 1977) but need not be included in the Reference list.

The main objective of this quarterly journal is to provide a way for STAA members and others interested in the archaeology of southern Texas to share the information they have with others. We encourage your full participation through submission of your information for publication; we are particularly interested in receiving manuscripts from those in the less well-known counties of our region, to document even surface finds and old collections. Only through such total member participation can we, as a group, build up a comprehensive picture of the archaeology of our area!

Be sure to indicate the author's name (or names, if more than one author) on the manuscript. Make a photocopy of the submitted material for your records before mailing to the Editor. Each author is mailed two "author copies" upon publication.

Manuscripts or other information may be submitted to: Evelyn Lewis, Editor, La Tierra, 9219 Lasater, San Antonio, Texas 78250. Let me hear from you soon.

THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

The Southern Texas Archaeological Association brings together persons interested in the prehistory of south-central and southern Texas. The organization has several major objectives: To further communication among avocational and professional archaeologists working in the region; To develop a coordinated program of site survey and site documentation; To preserve the archaeological record of the region through a concerted effort to reach all persons interested in the prehistory of the region; To initiate problem-oriented research activities which will help us to better understand the prehistoric inhabitants of this area; To conduct emergency surveys or salvage archaeology where it is necessary because of imminent site destruction; To publish a quarterly journal, newsletters, and special publications to meet the needs of the membership; To assist those desiring to learn proper archaeological field and laboratory techniques; and To develop a library for members' use of all the published material dealing with southern Texas.

S T A A OFFICERS AND STAFF - 1990

CHAIRMAN - Frances Meskill (San Antonio) IMMEDIATE PAST CHAIRMAN
Ray Smith (San Antonio)

VICE-CHAIRMAN - Ray Blackburn (San Antonio)

SECRETARY - C. K. Chandler (San Antonio)

TREASURER - Diane Couch (San Antonio)

LA TIERRA

Editor - Evelyn Lewis (San Antonio)
Staff Artist - Richard McReynolds (S.A.)
Columnist - Thomas R. Hester (Austin)
Production - Shirley Van der Veer (S.A.)

NEWSLETTER

Editors: Herb & Kay Allison (San Antonio)

SPECIAL PUBLICATIONS

Editor: Jimmy Mitchell (Converse)

AREA CONSULTANTS

Tom Beasley (Beeville)
Bill Birmingham (Victoria)
James Garber (San Marcos)
Rita Gunter (Corpus Christi)
T. C. Hill (Crystal City)
Malcom Johnson (Fredericksburg)
Tom Kelly (San Antonio)
Ed Mokry (Corpus Christi)
Lee Patterson (Houston)
Ray Smith (San Antonio)

FIELD DIRECTORS

Anne Fox (San Antonio)
Tom Kelly (San Antonio)
Joe Labadie (Comstock)
Dan Potter (San Antonio)
Smitty Schmiedlin (Victoria)
Ray Smith (San Antonio)
Shirley Van der Veer (San Antonio)

COMMITTEE CHAIRPERSONS

Discovery

C. K. Chandler (San Antonio)

Documentation

Kay Hindes (Charlotte)

Educational Programs

Jane Meskill (San Antonio)

Hospitality

Heidi Mitchell (Converse)

Mailing

Roger Hemion (San Antonio)

Membership

Kay Allison (San Antonio)

Program

Don Lewis (San Antonio)

Shirley Mock (San Antonio)

Program Coordinator

Ray Blackburn (San Antonio)

Publication Sales

Bette Street (San Antonio)

Lew Street (San Antonio)

Publicity

Wilson McKinney (San Antonio)

Barbara Meissner (San Antonio)

Registration

Frances Ward (San Antonio)

Social

Mark Kuykendall (San Antonio)

Special Projects

Lynn Highley (San Antonio)

Bobby McGregor (San Antonio)

Telephone

Paul Ward (San Antonio)

STAA LIBRARY

(See Table of Contents)