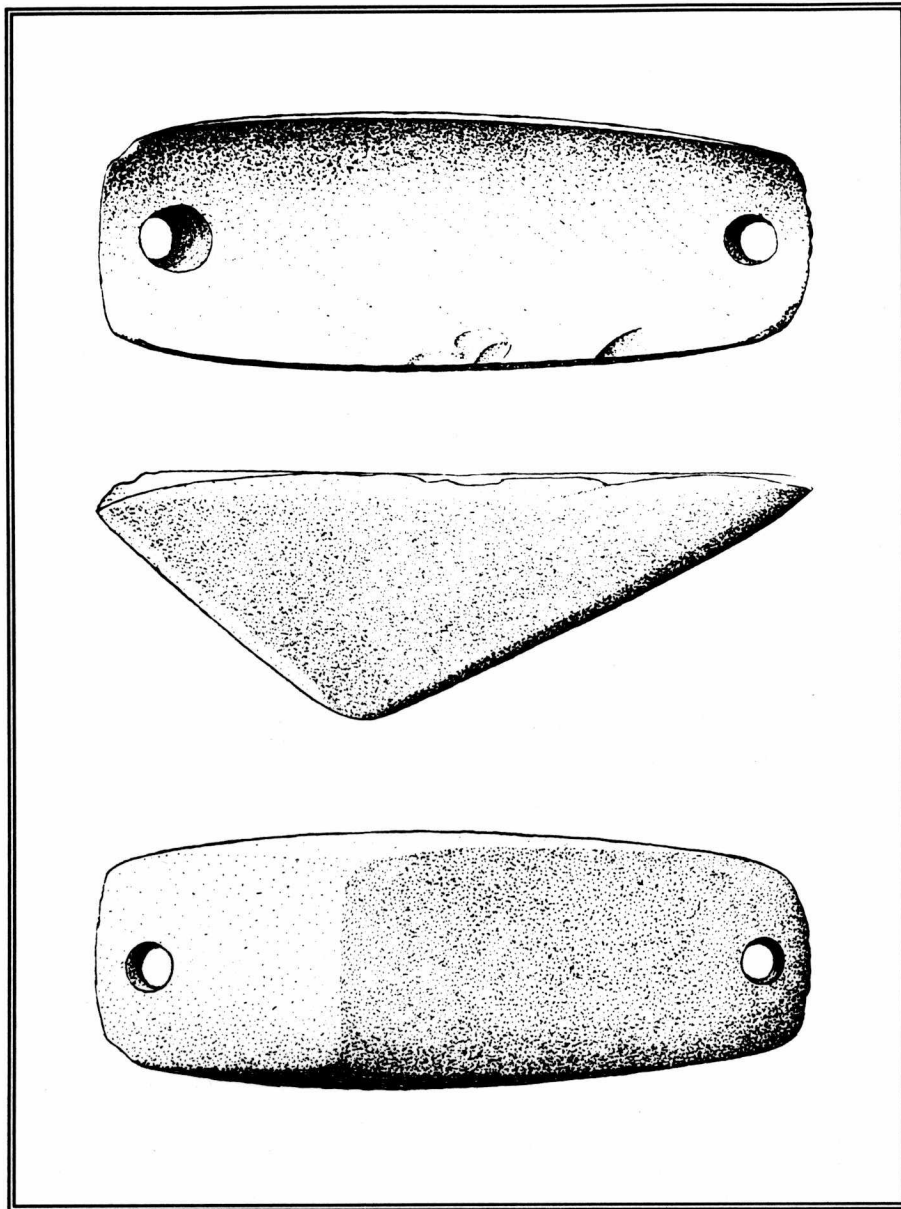


# LA TIERRA



VOLUME 20, No. 3  
July, 1993

**JOURNAL OF THE  
SOUTHERN TEXAS  
ARCHAEOLOGICAL  
ASSOCIATION**

# LA TIERRA

## QUARTERLY JOURNAL OF THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

Volume 20, No. 3  
July, 1993

Evelyn Lewis  
Editor

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About the Cover: A boatstone in three views by Richard McReynolds. See report on page 19 by C. K. Chandler. Other illustrations by Richard are on pages 10, 11, 15, 20 and 27.

Manuscripts for the Journal should be sent to: Editor, *La Tierra*, Evelyn Lewis, 9219 Lasater, San Antonio, Texas 78250. Past issues of the Journal and Special Publications available by requesting an order form from STAA (Jim Mitchell), P. O. Box 791032, San Antonio, Texas 78279. Dr. T. R. Hester may be contacted at the Texas Archeological Research Laboratory, University of Texas, Austin, Texas, 78712. For membership information contact the Membership Chairman, Kay Allison, 301 East Rosewood, San Antonio, Texas 78212 (210-733-1744).

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## *IN MEMORIAM*



*Harvey P. Smith, Jr.*

Harvey Partridge Smith, Jr., one of the founding members of the Southern Texas Archaeological Association (STAA), passed away on June 2, 1993 at the age of 75. Harvey had also been a member of the Texas Archeological Society (TAS) for 31 years. He was born in San Antonio on March 28, 1918. His education included Alamo Heights High School, San Antonio Junior College, and The University of Texas, earning a BBA degree at the latter in 1940. He spent four years in the U.S. Air Force in World War II, discharged with the rank of Major. He was married to Jean Barber Smith, and they were the parents of three daughters, Rebecca, Barbara, and Lizbeth.

Harvey was a well-known architect who was both interested and involved in several areas of archaeology. The missions and buildings of Spanish Colonial San Antonio held a special fascination for him, as his father's architectural firm had been involved in the restoration of several of these structures

in the 1920s and 1930s. Harvey authored articles in *La Tierra* on Mission Espada and the Spanish Governor's Palace. His interests further included the archaeology of south and south-central Texas, and most of all, the Trans-Pecos. He authored, and coauthored, papers on Brewster County rockshelters and their artifacts, published in the TAS Bulletin in 1962 (Vol. 33) and 1968 (Vol. 38). He was fascinated with the stratigraphy of Baker Cave and the kinds of data that can be obtained from such well preserved deposits; two brief articles appeared in *La Tierra* in 1976 and 1977. I recall with great fondness his participation in the fieldwork of both the 1976 and 1984 Baker Cave projects.

Harvey was involved in many STAA activities. For example, he was a crew chief at Timmeron Rockshelter in Hays County and a paper he wrote on this experience appears in a 1975 issue of *La Tierra*. I also remember valued assistance that he provided at 4IBN63, the site of the 1985 field school of The University of Texas at San Antonio (UTSA). One group of hardworking students had been assigned to test an area south of the burned rock midden that I was sure contained living-area deposits (it didn't) -- and Harvey's good-humored supervision carried these students through the heat and frustration.

In the 1970s and 1980s, he was involved in archaeology and academics at UTSA. He carried out surveys for the Center for Archaeological Research, including a survey of Friedrich Park in Bexar County (*Archaeological Survey Report* 12, 1975) and of properties in Karnes and Live Oak Counties (*ASR* 64, 1978). He took part in the 1979 UTSA excavations at Colha, Belize (the Maya were another of his interests; see *La Tierra* 7[1], 1980). One of the first to enroll in the UTSA graduate program, he received his MA degree in 1982, with a thesis dealing with settlement patterns along a south-central Texas stream. He was later named as a Research Associate of the Center.

The Witte Museum was another focal point of Harvey's archaeological interests, and he served on its Archaeology Committee, supporting the development of the Lower Pecos exhibit and the publication of *Ancient Texans*, by Shafer and Zintgraff.

We will greatly miss Harvey Smith. He had many friends in the STAA and in Texas archaeology. He had a great enthusiasm for the study of both prehistoric and historic sites. Those of us in the STAA and at UTSA who were fortunate to have worked with Harvey will long remember his sense of humor, and of optimism, key ingredients not only in life, but in any archaeological project.

Thomas R. Hester



**NOTES ON SOUTH TEXAS ARCHAEOLOGY: 1993-3**  
***Insights into Clovis Technology:***  
***A Clovis Point from Atascosa County, Southern Texas***

***Thomas R. Hester, Byron D. Barber, and Pamela Headrick***

Clovis points have been reported from across southern Texas (cf. Hester 1980), a number of them in the pages of *La Tierra* (e.g., Kelly 1983, 1988). Previous Clovis occurrences in Atascosa County have been noted by Meltzer (1987). However, the specimen described and illustrated here (Figure 1) is unusual in several aspects; it is difficult to tell whether it is finished or unfinished, but it has some traits that provide certain insights into the processes involved in the making of this ancient artifact form.

The artifact is a surface find, collected by Mr. Barber in 1991, in a lowland area of Raccoon Creek, about .25 miles north of 41AT111 (Hester and Barber 1990). Mr. Barber recalls that the specimen was broken into two segments, but that these were together in an eroded game trail. The break (indicated by the line in Figure 1, a) does not appear to have been related to a manufacturing failure (Glenn Goode, personal communication). It appears to be a rather recent fracture, perhaps broken by cattle using this trail. One corner of the specimen is also broken; this appears to be a fracture that occurred either during use or after the specimen was discarded.

In terms of dimensions, it is 93 mm long. Maximum width is 32 mm and the approximate basal width is 25 mm. The maximum thickness is 7 mm, occurring about 30 mm above the base; it is 4.5 mm thick near the base and 6 mm thick near the distal tip. Weight is 23.1 grams.

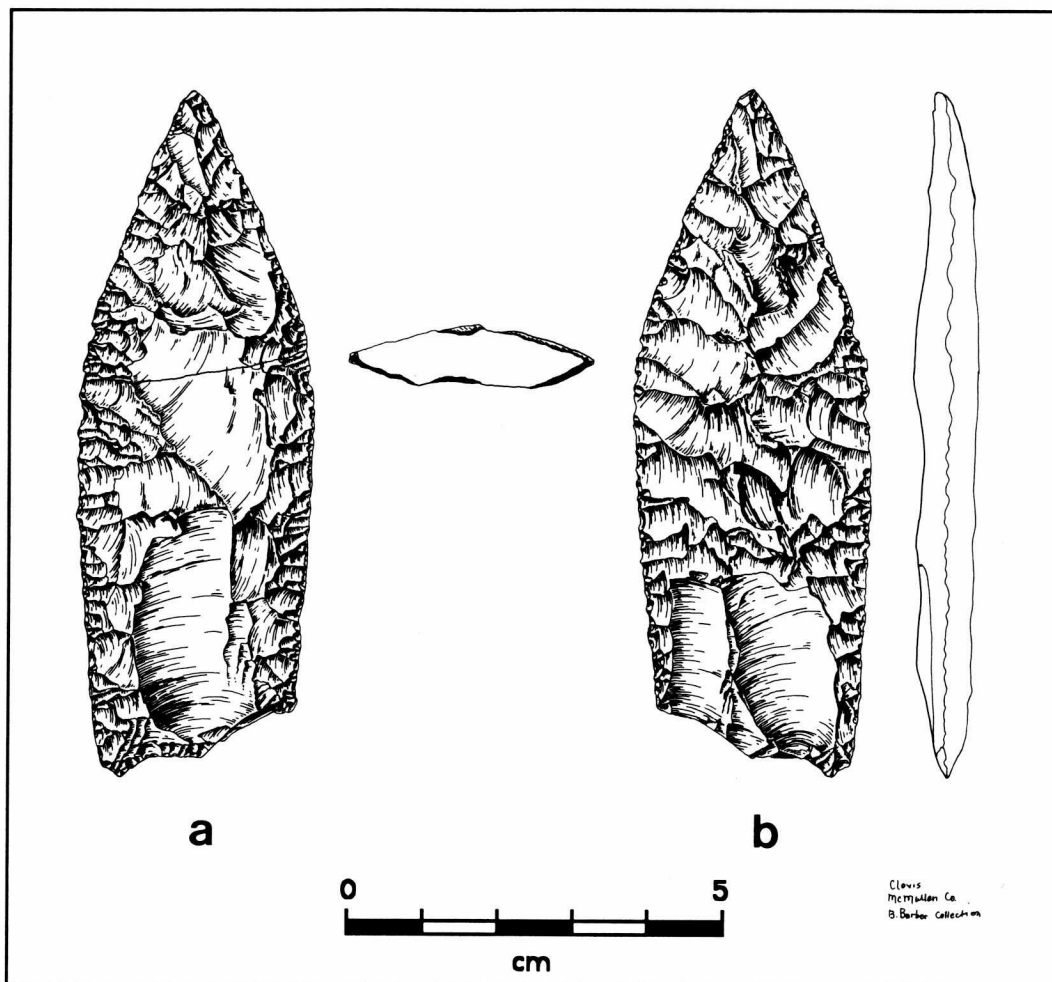
The raw material of which this specimen is made is a very fine-grained banded Georgetown chert (cf. Turner and Hester 1993:15; Banks 1990:60). It is gray to dark gray in color (Munsell 5Y, 5/1-4/1) over much of the distal part of the specimen, though an oblique band encompassing most of the base is dark brown (very dark grayish brown; 5Y, 3/2). It has a vitreous appearance and a slick, almost greasy feel, and these attributes suggest it is made of heat-treated chert. Under

ultraviolet light the fluorescence (UVLF), of the specimen's distal half is a pale yellow color, and the proximal portion, partially pale yellow and the remainder, a dark brown. A Georgetown flake in the lithic reference collections at the Texas Archeological Research Laboratory was used for comparison and is distinctly yellow, though within the range of the distal tip of this specimen. Perhaps heat-treating has affected the manner in which the specimen fluoresces, although Michael Collins (personal communication) has not found this to be the case in his extensive UVLF research.

The lithic technological traits of the specimen include broad, flat interior flake scars from the initial preform (cf. Collins 1990:73). There is fine parallel retouch on one face (Figure 1, a), but this is largely absent on the opposite side. The basal edge was beveled (ibid.:74) to create a striking platform. It may have converged to a nipple-like protrusion in the center of the base. Using this platform, a single flute 34 mm long and 12 mm wide was first removed from one face (Figure 1, a). An attempt to detach a similar flute from the opposite face was a failure (the remnant of this failed flute can be seen just above the middle of the base in Figure 1, b). Subsequently, two flutes were detached from either side of the platform area of the failed flute. The very narrow platform area of one of these flutes (e.g., the flute on the right in Figure 1, b) suggests that they were removed by pressure or perhaps lever-pressure (Glenn Goode, personal communication). These two flutes are 24 (estimated) and 25 mm long, and 8.5 and 14 mm wide, respectively.

The cross section is relatively flat with symmetrically converging edges (Figure 1). The outline of the specimen appears





**Figure 1. Clovis Point from Atascosa County. The specimen is illustrated actual size. The break noted in the text is shown in a. Both longitudinal and transverse cross sections are shown. Drawings by Pamela Headrick.**

somewhat atypical of Clovis points in southern Texas. Indeed, the distal tip looks almost as if it had been reworked and shortened. However, there is no visible resharpening on the edges (Glenn Goode, personal communication). Under 30-60X magnification, the high points along the edges exhibit some dulling and crushing. This is most likely due to edge abrading during the biface--thinning process (cf. Turner and Hester 1993: 287).

There are several traits of interest, some that suggest that this specimen might be an incomplete Clovis point. Most notable is the lack of basal edge dulling. Additionally, the beveled edge along the base has not been removed as is seen on other

Clovis specimens in south Texas. Edge trimming with neat, parallel flake removals was done only on one face. Had this specimen come from a buried context, we might have had other byproducts of point manufacture. Without that context, we can only guess as to whether the specimen was discarded at a very late stage of manufacture, or was a valued point or tool--despite lacking some of the criteria we attribute to "finished" points of this type. Unfinished Clovis points, broken in manufacture, are reported from Kincaid Rockshelter (Collins et al. 1989). However, one broken, even after the successful removal of one flute (ibid.: Figure 1, d), appears much more in the "preform" mode than the Atascosa County specimen.

## ACKNOWLEDGEMENTS

Pamela Headrick drew the artifact. We are grateful for comments and observations provided by Glenn Goode and Michael B. Collins. In Vol.

1, No. 1 of the Newsletter of the Friends of the Texas Archeological Research Laboratory, this specimen was erroneously identified as being from adjacent McMullen County, about 1 mile to the south.

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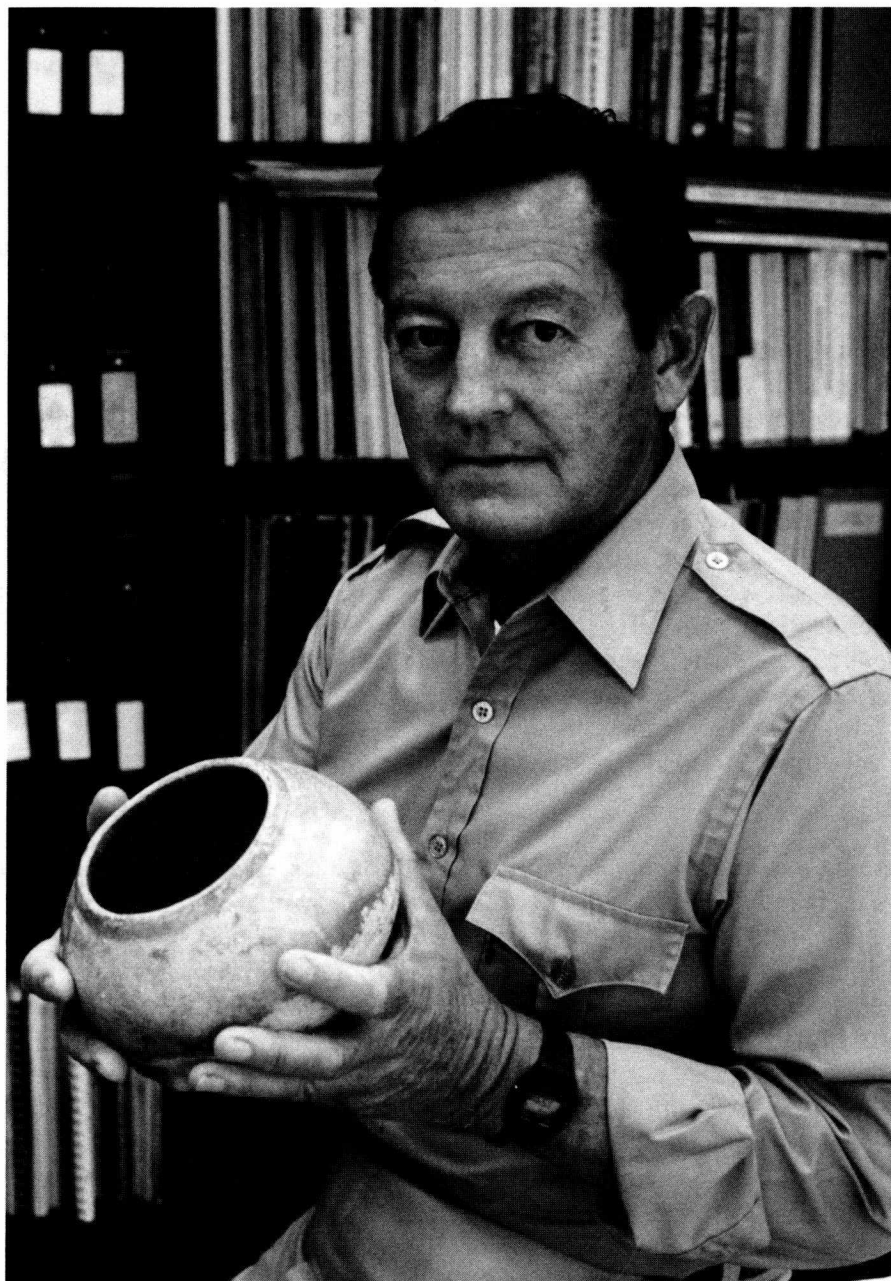
## ***DON'T IGNORE THE BIG PICTURE***

Some of the hottest discussions among STAA members have to do with artifact typology. From lithic points to ceramic pottery and from bannerstones to musket flints we eagerly seek the "type" as though that answered our questions about the source and use of the artifact. Actually, most of the time we seem to be concerned about classification, which is a set of empirical groupings to provide pigeonholes in which we can place each type of artifact. In contrast, typology has as its objective the relation of the artifact toward the solution of a particular problem or group of problems.

As useful and convenient as these groupings are, we need to examine their significance in terms of the answers we seek from the physical evidence. How do these artifacts bear witness to the reasons for their particular construction, the manner of use, the special significance they may have had in the society that created them? What is as important as the artifacts themselves is the context in which they were located. This aspect is usually played down, and actual data as distinct from subjective interpretation may not exist.

Fundamentally we need to consider the whole picture so that the bits and pieces which we recover from the past can be used in combination to flesh out our image and understanding of how earlier people learned to cope with nature and with each other.

Don Lewis  
Associate Editor



## **JACK D. EATON**

### ***20 Years of Service***

Jack Eaton, Director of the Center for Archaeological Research at The University of Texas at San Antonio (UTSA), is retiring in August after almost 20 years of dedicated service. He joined the research center in 1974 and was with the first group to occupy the new campus in 1975.

Jack, working with Tom Hester, has been a key person in the organization and development of the Center, and the only full-time professional archaeologist. He has served as research associate, assistant director, associate director and, since 1987, director of the Center. As administrator and principal investigator for archaeological research carried out under contracts and grants, he has been



responsible for nearly 450 projects with the results disseminated in publications having international distribution. In addition, Jack has actively advised and instructed students and staff in field and laboratory work, as well as report preparation. His direction of field excavations have included the Alamo, San Fernando Cathedral and the Spanish missions at Guerrero, Coahuila. And he has spent many years of investigations at the Maya sites of Colha, Belize, and Río Azul, Guatemala where he served as co-director of these projects.

Before coming to UTSA, Jack was staff archaeologist with the Middle American Research Institute of Tulane University. His work in Yucatán included a 500-mile walking survey of the Yucatán coast and the discovery of previously unknown ruins in the uninhabited forest of the Río Bec region. In addition, he has carried out excavations at the fortified site of Becan, the discovery of ancient Maya agricultural land features across the Río Bec region, the excavations of ancient Maya farmsteads, plus the discovery, excavation, and restoration of the beautiful ruins of Chicanná and Campeche.

Much of Jack's research in Mesoamerica has focused on ancient Maya settlement, architecture, and courtyard residential groups. His publications and reports can be found in scientific journals, monographs, book chapters and magazine articles. He has lectured widely to professional and public groups including anthropology classes at UTSA and other institutions.

Prior to enrollment at Tulane, Jack served with the Marine Corps during World War II and in the Korean conflict.

After earning a degree in engineering in early 1952, Jack entered the U. S. space program that began several years before the formation of NASA and he was with that early pioneering group that did the initial development of the Air Force Missile Test Center at Cape Canaveral and the down range tracking facilities in the Bahamas. Later, with Philco Corporation Western Development Laboratories, he was senior engineer for designing satellite tracking stations for Tule, Greenland, and Guaymas, Mexico, and was Project Engineer for the Nike Communications System in Alaska, our first line of northern defense. He has carried out important projects in Canada, Africa, and South America, as well as serving with distinction with the United States Embassies in France and Norway as technical advisor to the French Air Ministry and the Royal Norwegian Air Force concerning European mutual defense. He has also taught classes for U. S. and foreign technicians in electronics and microwave systems.

Overall, Jack brings to the University of Texas at San Antonio, Center for Archaeological Research, more than 42 years of broad, international background in organization, leadership, research and development, and publications. This has been a definite benefit to the University, the profession, and the community.

## SOME EXAMPLES OF BANDY POINTS

Richard McReynolds

### ABSTRACT

The purpose of this paper is to present for discussion what I consider to be Bandy points. Many of the examples are incomplete, but in my view retain the characteristics of the Bandy type. As a means of ready comparison I have included three well known and accepted examples from the Witte Museum collection. A wear analysis was performed by C. K. Chandler on all examples except the Witte Museum and Wilson-Leonard specimens.

### INTRODUCTION

Depictions of Bandy points in recent typology publications sometimes use questionable examples or use quantities which are insufficient to fully portray variations within the type. There is a definite shortage of information in the scientific literature. The non-professional probably hasn't had the opportunity to see the depiction of more than half a dozen examples of Bandy points as presented by the professional archaeologist. This may not change until the information from Hinds Cave or the Wilson-Leonard site is published.

The Bandy point was first described by James Word in the publication *Excavations at Baker Cave, Val Verde County, Texas* (Word and Douglas 1970). That description is as follows:

Blade edges vary from gently convex to slightly recurved.

Well barbed. Notches narrow or "V" shaped.

Corner notching produces lightly expanding stem. Bases arc gently and convexly to center producing fishtail appearance.

Length estimate 4.2 cm to 5.0 cm. Width 2.5 cm to 3.7 cm. Thin cross section. Very well made.

### DISCUSSION

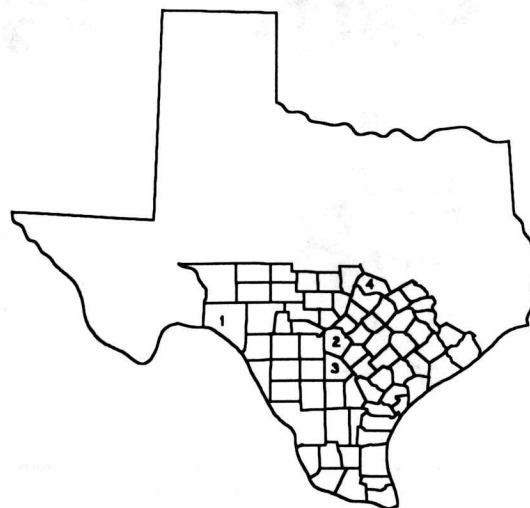
Of the six specimens found by Word, two are depicted in his 1970 publication (Word and

Douglas 1970, Figure 10, G and H). Specimen H appears to be a resharpened example as the lateral edges are slightly concave and barbs are short and pointed.

A single fragmentary specimen was found during the 1976 excavations at Baker Cave. It is pictured, actual size, in *Baker Cave, Val Verde County, Texas: The 1976 Excavations* (Chadderdon 1976, Figure 22 B).

Three specimens are represented in *A Field Guide to Stone Artifacts of Texas Indians* (Turner and Hester 1993). They are in the Witte Museum collection. These examples were also photographed by Jim Zintgraff for *Ancient Texans: Rock Art and Lifeways Along the Lower Pecos* (Shafer 1986, with Photographs by Jim Zintgraff).

The dart points depicted in Figure 1, with the exception of Specimens B and I, were shown to a group of archaeologists by C. K. Chandler. In the group were Tom Hester, Mike Collins, Harry Shafer and Elton Prewitt. There was not full agreement that all these specimens were Bandy. Shafer said points like example F were found at Hinds Cave and were classified as Martindale. Mike Collins agreed but was unsure about some of the others (personal communication with C.K. Chandler). This experiment brings attention to one of the main issues in the typology of Bandy points—that is its similarities with Martindale points of roughly the same time period.



Texas map. 1, Val Verde; 2, Bexar; 3, Atascosa; 4, Williamson Counties.

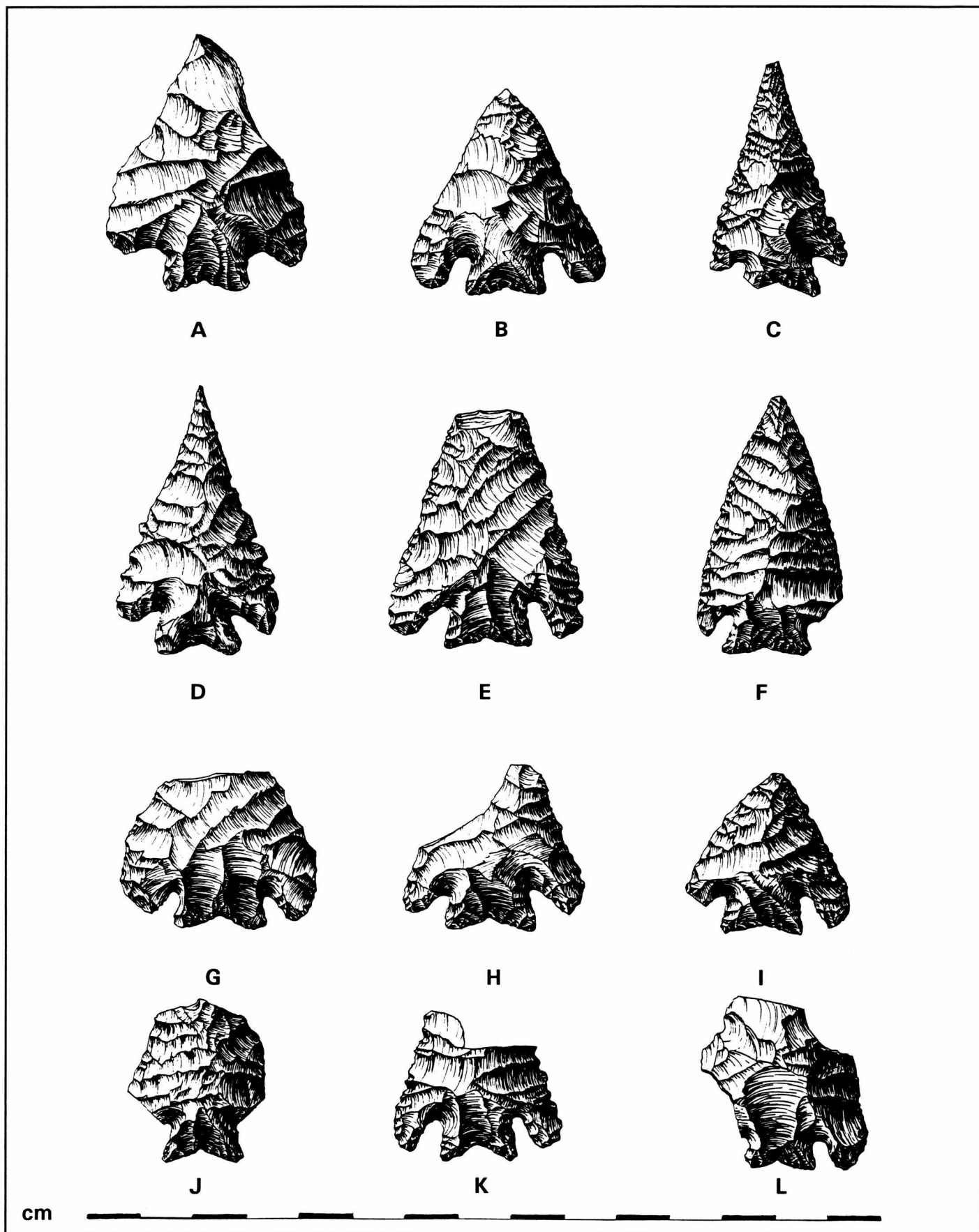


Figure 1. Bandy points. I, from Atascosa County. All others from Val Verde County. Illustrations by the author.

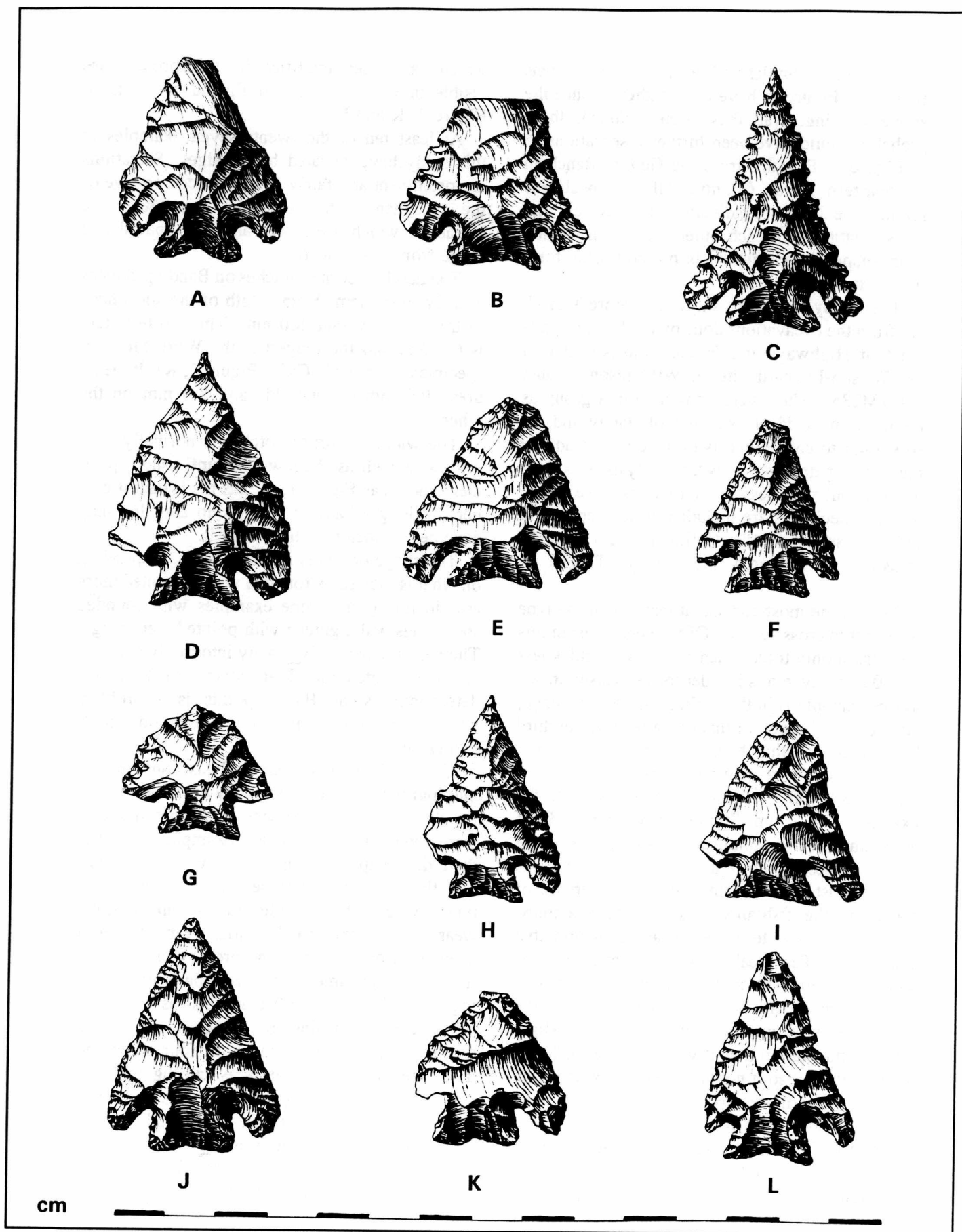


Figure 2. Bandy points. A - C and J - L from Val Verde County; D - I from Bexar County. Illustrations by the author.

All of the examples in Figure 2 and Specimens B and I of Figure 1, have been gathered since the above viewing. Had they been included, there probably would have been further reservations.

Figure 2, D-I, are from the George Ranch in northeastern Bexar County. All six specimens retain some degree of patination. They were found in association with each other and a thin slightly heart-shaped biface which is possibly a preform for the type.

The Bandy specimens shown as Figure 3, A-C, are from the excavations done by the State Department of Highways and Public Transportation at the Wilson-Leonard site in Williamson County (41WM235). They were chosen from a group as being the most ideal examples of Bandy and are so similar to each other as to have been made on the same pattern. No wear analysis was performed, but thickness measurements were taken. Subject specimens are included in this paper with the permission of Mike Collins at the Texas Archaeological Research Laboratory (TARL) in Austin.

One of the most consistent features of the type is their thin cross section. Of the specimens in this discussion only three reach a maximum thickness of 6.0 mm. Even this is a deceptive measurement, as one example is in the unfinished preform stage, another was broken in manufacture, and the third has a small bulb that the knapper couldn't remove. Thickness of the remaining points range from 5.5 mm to 3.0 mm. Average thickness for all the examples is 4.7 mm. Stem thickness ranges from a maximum of 4.1 mm down to 3.0 mm. Average stem thickness is 3.6 mm.

The most visible identifying characteristic of Bandy is the fishtailed base. Some examples, however, appear to have variations within that description. The ideal, with two convex arcs, is sometimes one arc and a straight line or two straight lines forming a 'V' shape. One of the Bexar County examples (Figure 2, I) has so slight a basal indentation that it would not be included here as Bandy had it not been found in association with the other more recognizable examples (personal communication with Rusty Vereen).

The barbs on Bandy are fairly broad and often extend nearly to the base line. This appears to be consistent except when they have been altered by resharpening of the lateral blade edges. Barbs

which have been modified by this process are visible in Figure 1, C and F, and one side of Figure 2, K and L.

At least ten of the twenty-seven examples in this study have serrated blade edges. Serrations are prominent and fairly evenly spaced on five of the specimens. The remaining examples have serrations which are more randomly spaced and range from coarse to fine.

The depth of corner notches on Bandy produces a fairly short stem. Stem length of the specimens in this study average 8.0 mm. The shortest stem is 6.0 mm and the longest is the Witte Museum specimen from Eagle Cave (Figure 2, K). It measures 10.0 mm on one side and 8.0 mm on the other.

The width of corner notches is normally very narrow as well as shallow. The unfinished specimen, shown as Figure 1, A, has the broadest corner notching of any in this group and this may have been a factor in discarding it.

The shape of stems is inconsistent. Depending on what is viewed as rounded versus pointed there are, in this group, nine examples with rounded stem tangs and eighteen with pointed stem tangs. The round tangs evolve easily into the Baker type and the pointed into Martindale. It's here that determining some Bandy points is a problem which more often than not will rely on simple judgement.

C. K. Chandler's wear analysis confirms the multipurpose use of the majority of points studied for this paper. No evidence of impact fractures were found, but at least ten examples have had their distal tips refurbished, so we will assume that their primary purpose was as a projectile point. Nine of the examples have no apparent use wear, but of this number four were evidently abandoned or broken in the process of manufacture. Seven specimens have wear patterns indicating use as knives on soft materials, as evidenced by light edge crushing, rounding and polish that extends to the interior ridges on four examples. Two specimens were used as cutting tools on materials as firm as lechuguilla or sotol, to as hard as wood or green bone. This is indicated by a greater degree of edge crushing, rounding and polish, combined with some micro-flaking on one example. The broken distal ends of two specimens appear to have served as scrapers and knife use.



Both have rounding, polish, some nibbling and striations at right angles to the edge of the break. Finally, the slight reductions of distal edges by wear rounding on three examples indicate their use as drills or perforators.

### Specimen Descriptions

#### Figure 1

A. Val Verde County - Unfinished preform. No edge retouch. Corner notching is broader than normal for type. No tool wear. Maximum thickness (MT) = 6.0 mm. Maximum stem thickness (MST) = 3.5 mm. Collection of Steve Hooper.

B. Val Verde County - Distal tip resharpened. Edges of barbs exhibit polish, but no edge alterations which indicate use as a cutting or scraping tool. MT = 4.5 mm. MST = 4.0 mm. Collection of Dan Davis (also see Davis 1991).

C. Val Verde County - Lateral edges resharpened. Rounding of flake arrises toward distal end. Serrated blade edges crushed and rounded. Used as knife and perforator. MT = 5.0 mm. MST = 3.5 mm.

D. Val Verde County - Crushing and rounding of distal edges indicate use as a drill or perforator. Blade edges serrated. MT = 5.0 mm. MST = 4.0 mm. Collection of Emmit Long.

E. Val Verde County - The broken distal point and all edges have noticeable rounding and polish with striations at right angle to broken edge. Serrations are noticeably rounded and polished. High polish 2-3 mm wide left edge and 1-2 mm wide along right edge. Possible use in scaling fish or scraping hides. Serrated blade edges. MT = 5.5 mm. MST = 4.0 mm. Collection of Ben McReynolds.

F. Val Verde County - Both lateral edges resharpened. Blade slightly beveled right. All flake ridges show rounding, polish and light edge crushing that is more prominent 5-7 mm along edge than toward blade center line. Used as knife on relatively firm material. MT = 4.5 mm. MST

= 3.7 mm. Collection of Emmit Long.

G. Val Verde County - No evident tool wear. Possibly broken in manufacture. MT = 6.0 mm. MST = 3.5 mm.

H. Val Verde County - All edges quite sharp. No use wear. Probably broken in manufacture. MT = 4.5 mm. MST = 3.7 mm.

I. Atascosa County - Heat treated chert. Resharpened toward point. Edge crushing, rounding and polish indicate use as a knife. MT = 5.0 mm. MST = 3.6 mm. Ben McReynolds collection.

J. Val Verde County - Edge rounding, but probably not used as knife or scraper. Reworked nipple or peak on distal end shows light use wear and polish. MT = 4.4 mm. MST = 3.4 mm.

K. Val Verde County - Broken edge of distal point has striations and nibbling. Used as a scraper. Serrations along lateral edges crushed with some micro-flaking. Lateral edges indicate cutting firm material, possibly bone or wood. Blade edges serrated. MT = 4.6 mm. MST = 3.5 mm.

L. Val Verde County - No wear pattern visible. Subjected to considerable heat, has thermal fractures, heat spall and fine cracks. Smallness of stem is notable. MT = 5.0 mm. MST = 3.0 mm.

#### Figure 2

A. Val Verde County - No evidence of edge retouch or use modification. Probably broken in manufacture. MT = 5.0 mm. MST = 4.0 mm. Collection of Terry Kelly.

B. Val Verde County - Right edge serrations broken off towards back face. No evident use wear or polish. MT = 4.5 mm. MST = 3.2 mm. Collection of Terry Kelly.

C. Val Verde County - Subjected to fire. Heat spall on one face. Ashy coating on portion of both faces. No use wear patterns visible. Lateral edges well serrated. MT = 5.3 mm. MST = 3.0 mm. Collection of Mike McReynolds.

D. Bexar County - Moderate to heavy patina all surfaces. Distal tip shows use as drill or perforator. No edge retouch. Blade face has bulb which couldn't be removed. MT = 6.0 mm. MST = 3.8 mm. Collection of Rusty Vereen.

E. Bexar County - Light patina over all surfaces. Distal tip resharpened. Edge rounding and polish. Considerable use as knife or scraper in processing relatively soft material. MT = 5.0 mm. MST = 4.0 mm. Collection of Rusty Vereen.

F. Bexar County - All blade edges have noticeable use polish of peaks and ridges, but no crushing. Interior ridges have rounding. Possible use in cutting vegetals such as sotol. MT = 4.0 mm. MST = 3.2 mm. Collection of Rusty Vereen.

G. Bexar County - White spotty patina all surfaces. Both blade edges resharpened and have light use wear polish. MT = 3.8 mm. MST = 3.5 mm. Collection of Rusty Vereen.

H. Bexar County - Heavy patina all surfaces. No fine edge retouch. Distal tip and edges show most use polish. Interior ridges have polish. Used processing relatively soft materials. MT = 3.0 mm. MST = 3.0 mm. Collection of Rusty Vereen.

I. Bexar County - Heavy patina on all surfaces. Distal point reworked. Light rounding and polish all edges and across interior ridges. Left edge is finely serrated. MT = 5.0 mm. MST = 4.1 mm. Stem base notable for its slight concavity. Collection of Rusty Vereen.

J. Val Verde County - Witte Museum collection. No wear analysis performed. Marked R. L. M. for Richard Lee Mannen. Collected mid-1930s, Lower Pecos, Langtry area. Stem expands very slightly, almost straight stemmed. MT = 4.5 mm. MST = 3.5 mm.

K. Val Verde County - No wear analysis done. MT = 4.0 mm. MST = 3.0 mm. Marked 35-6352-127-P, Eagle Cave. Collected 1935 by

Jack Walker Davenport and Harding Black (Davenport 1935). Witte Museum collection.

L. Val Verde County - No wear analysis done. MT = 4.5 mm. MST = 4.0 mm. Marked 35-6352-127-P, Jacal Canón. Collected 1935 by Jack Walker Davenport and Harding Black. Witte Museum collection.

### Figure 3

A. Williamson County - No wear analysis made. MT = 4.4 mm. MST = 3.0 mm. Specimen 5H, site 41WM235 (Wilson-Leonard site), courtesy of the Texas Archeological Research Laboratory (TARL).

B. Williamson County - No wear analysis made. MT = 4.5 mm. MST = 4.1 mm. Specimen 55M. Site 41WM235, courtesy of TARL.

C. Williamson County - No wear analysis made. MT = 3.7 mm. MST = 3.4 mm. Specimen 50L D-1. Site 41WM235, courtesy of TARL.

There is a general consensus that up to now too little information has been developed from controlled excavations to make firm statements on descriptions and time periods of Early Barbed, Baker, Bandy and other small stemmed categories. Professional opinions differ on whether the period between 8,000 and 5,000 years B.P. is a pre-Archaic transitional period which separates the Paleo-Indian from the Archaic, or if it is fully Archaic following an earlier transitional period. (McKinney 1981). Either way, the wide diversity of projectile point styles from these time frames pose typological problems. Forms vary from site to site and even within a site (Collins 1976; McKinney 1981). These dissimilarities have formerly complicated satisfactory classification and to some extent their place in time. In this regard Bandy fares better than some of the other types. Mike Collins did a seriation for all available sites older than 5,000 years in the Amistad area. Bandy came out pretty consistently between 5,000 and 5,500 years B.P. (Collins 1976). Turpin and Bement (1992) suggest a slightly earlier time frame which Hester extends to possibly 8000 B.P. There are

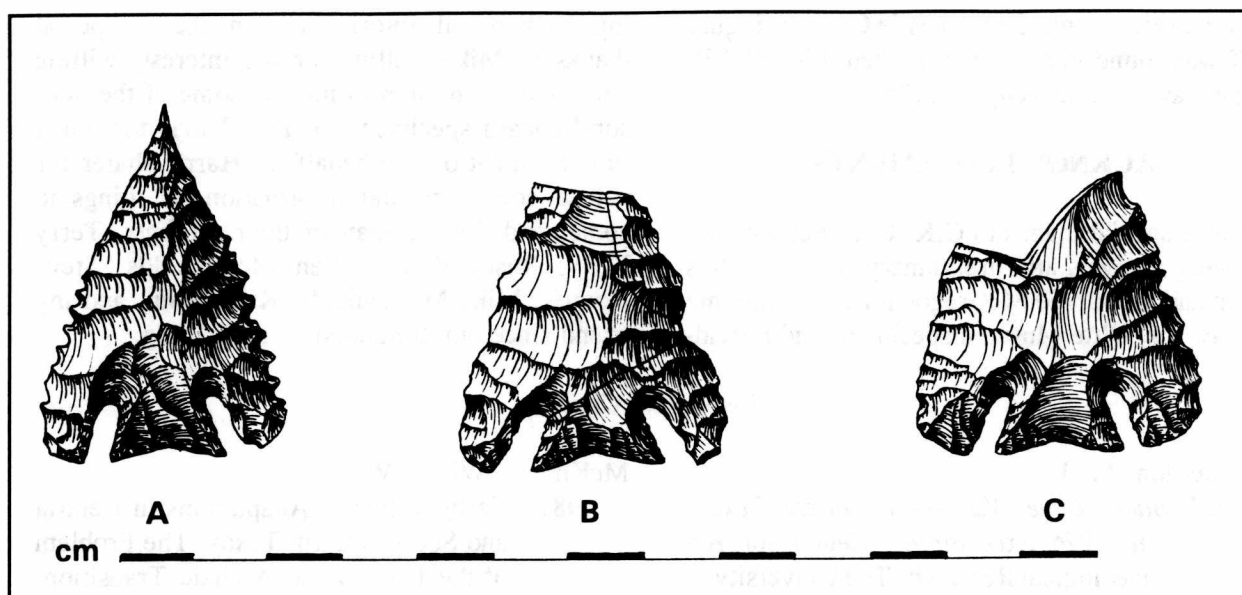


Figure 3. Bandy points. A - C from 41WM235, Williamson County.

presently two sites which have the potential to contribute additional information.

Excavations carried out at Hinds Cave in 1975 and 1976 should provide descriptive and chronological information as there were in excess of twenty Bandy points recovered. The final report is now in progress and hopefully will be published in a like format to the previously completed studies done by Texas A & M at Hinds Cave (personal communication with H. Shafer).

Archaeological work on the Wilson-Leonard site has been completed by TARL at the University of Texas at Austin. Several examples of the Bandy-Baker-Martindale group were found, so there should be some good definitive information from this important site. Final reports will include the work previously done by the State Department of Highways and Public Transportation in 1982-84 (personal communication with Mike Collins).

The examples in Figures 1, 2 and 3 fall within the present type description for Bandy. They should hold up to most scrutiny. Some have been modified to alter the original shapes of distal ends, lateral edges and barbs, but retain most characteristics which define them as Bandy. Forthcoming studies may expand on these characteristics to include the sometimes serrated blade edges, or to show a slight increase in length and width measurements. Until then these examples should pro-

vide a wider reference than has been available up to now.

#### Addendum

The Witte Museum specimens of Bandy should be familiar to anyone interested in Texas typology. Bobbie McGregor not only gave permission to draw these examples, but most graciously provided information on their background. I think a brief note on these specimens is justified.

In the 1930s archaeological expeditions were sent by the Witte to western Texas, primarily to acquire specimens for the museum. In 1931 a geologist, Richard Lee Mannen, with his wife, Aimee, and a man named Clifton Lane, were sent to the Comstock area. They were in the field from June 29th to July 28th and did partial excavations in Kelly Cave, Pecos Cave #4, some Indian mounds and the Langtry area. Specimen J of Figure 2 is a product of this expedition and is simply marked, Val Verde County, R.L.M. (see Mannen and Mannen 1931)

Four years later, in 1935, Jack Walker Davenport and Harding Black were sent to the Langtry area. March 9th through 12th was spent excavating a shelter designated Jacal L in Jacal Canyon. Figure 2, L from this shelter is marked 35-6352-127P, Jacal Canñn. March 15th thru 18th was

spent working Eagle Cave in Mile Canyon. Figure 2, K was found there and is marked 35-?- 127-P, Eagle Cave (see Davenport 1935).

### ACKNOWLEDGEMENTS

I owe special thanks to C.K. Chandler who did the wear analysis and preliminary review of this paper and to Bobbie McGregor for permitting me to draw the Witte Museum specimens and provid-

ing background information on them. Special thanks to Mike Collins for his interest, willing help, and permission to include some of the Wilson-Leonard specimens; to Dan Davis for much time he spent on my behalf; to Harry Shafer for valued comments and information on things to come; and for the loan of their artifacts, Terry Kelly, Rusty Vereen, Ben McReynolds, Steve Hooper, Mike McReynolds, Kit Corbin, and my friend since our childhood, Emmet Long.

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## TWO BONE ARTIFACTS FROM McFADDIN BEACH

*Paul Tanner and Ellen Sue Turner*

### ABSTRACT

A bone projectile point and a bone awl have been recovered from the McFaddin Beach site (41JF50) on the upper Texas coast and are documented here.

### INTRODUCTION

The McFaddin Beach site is an area on the upper Texas Coast roughly bounded by the Sabine-Neches and Trinity Rivers in Jefferson County. The locality is well known for the archaeological and paleontological materials surface collected over the past three decades (Long 1977; Hester et al.; Tanner and Tanner and Turner). The limited presence of bone tools in the substantial 41JF50 collections indicates the relative rarity of this artifact type. Fossil bone tools are occasionally found but there is some question as to whether they were made of fossil bone to begin with or took on some mineralization after they were made (Long 1977:16). Due to the shortage of available chert in the area, fossils (turtle shell, etc.) were occasionally used in making tools.

### ARTIFACTS

Specimen #1 (Figure 1, a-a') is a light brown to gray, dart point. The point is 38 mm long, 13 mm wide, 3 mm thick and the haft length is 10 mm. The base has been thinned. Both lateral edges on one face are beveled—the other face is flat. The bone material is dense and has some weight, but is not as dense as fossil bones found at 41JF50.

Specimen #2 (Figure 1, b) could be either a bone awl or a dart point. The worked tip (3 mm thick) is highly polished. The bone is more dense than the dart point (Specimen #1)—possibly having taken on mineralization after it was made. The maximum length of the tool is 70 mm and the base measures 17 mm at its widest point. If used as a dart point, the proximal end could have been hafted.

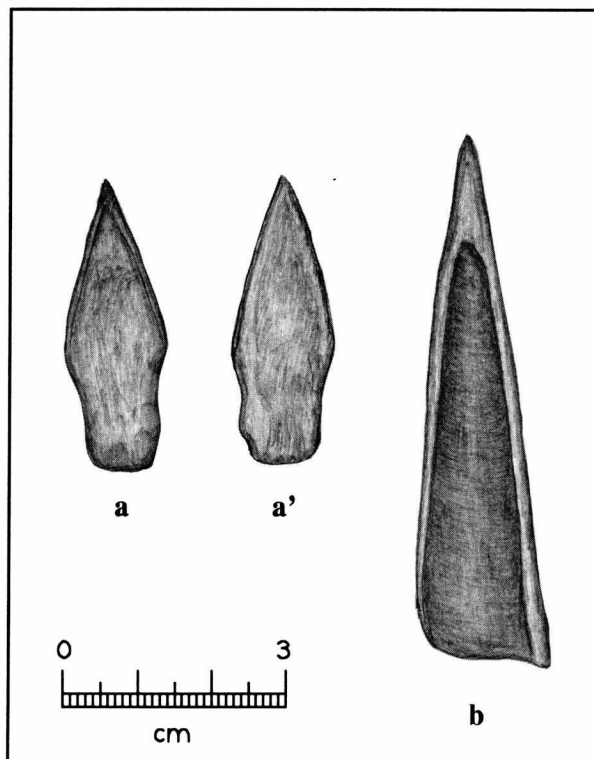


Figure 1. a, a', Obverse and reverse sides of bone point; b, bone awl or point. Found at McFaddin Beach. Drawing by Paul Tanner.

### DISCUSSION

Valuable by-products of animals hunted in prehistoric times for meat and skins were their bones—useful for tools, weapons and ornaments. The long bones of bison, bear and deer are thick, dense and hard and provide excellent material for making slender pointed tools (Whiteford 1990). After breaking the bone with a rock the ends of long bones can be broken off or the bones smashed to make sharp splinters. The leg bones of deer, birds and small animals can be cut off one joint end and the other cut or ground to a long tapering point—leaving the hollow end for hafting.

Some flat and some round projectile points of solid bone were ground from flat frag-





ments of bone or made from shaft sections and pointed on one or both ends. Barbed points were used for pronged fish spears. The small bones of big animals and of many small ones are of varied shapes and sizes and often needed little modification for their use.

Bone awls are pointed tools usually identified as hide or skin working tools and used for pierc-

ing or punching holes in shells, leather, cloth and wood. The distal end tapers to a sharp tip used for piercing while the proximal end may be smoothed but unshaped. The working end shows polish from use. Grinding bone is similar to sharpening stone tools—grooved sandstone abraders brought the awl to a fine point.

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#### AUTHORS TAKE NOTE

It has been brought to the attention of the editor (by a long-time member and contributor to *La Tierra*) that many of our authors are remiss in including a most important fact in the reporting of their work: The curation of the artifacts and records. Our reader wanted to view the collection for a site in East Texas, excavated by the Highway Department. The department was contacted but didn't know; try Texas A&M. That lead produced nothing, perhaps the collection is at TARL. After many letters and phone calls the artifacts were found at Stephen F. Austin University. When the collection is held by the author he might mention that fact in his report.

## A BOATSTONE FROM KERR COUNTY, TEXAS

C. K. Chandler

### ABSTRACT

This report documents and illustrates a boatstone from Kerr County in the southern part of Central Texas. It is a rare find for this area that appears to be the southwestern limits for the distribution of these artifacts in Texas.

### ARTIFACT DESCRIPTION

The descriptive terminology used here follows that used by Patterson (1937). The long straight side will be referred to as the base. The term "side" will have the usual meaning of the broad flat side view. The termini of the long base will naturally be called the "ends." The term "keel" will refer to the strip between the two sides that extends the full length of the edges opposite the base.

This specimen (see Figure 1, four views) has two holes, one at each end of the base that goes through to the broad, flat keel. There is no groove along the keel to join these two holes. The base has been hollowed out in a broad U-shaped groove five mm deep that is as wide as the base. There are no notches at the ends. The base varies in width from 25 mm at one end to 28 mm at the other with a maximum width of 33 mm at the center. The biconically drilled holes are five mm in diameter and are drilled mostly from the base. Base length is 95 mm, with a maximum width of 33 mm at center. The keel is nearly as wide as the base and has a depth of 32 mm. It does not make a long continuous curve as most boatstones do. It is of two flat planes that intersect at a 118° angle off center of the long axis. One plane is 45 mm long and one is 69 mm long forming an outline appearance of a triangle.

The flute-like groove along the base has numerous longitudinal striations that are visible only with magnification. There are no similar striations on the sides or keel. It appears the sides and keel were polished to the extent of obliterating evidence of the manufacturing technique. It is

presumed to have been shaped by pecking and possibly by abrasion. All edges are rounded except where the sides join the base. These long base edges are sharp and basically straight.

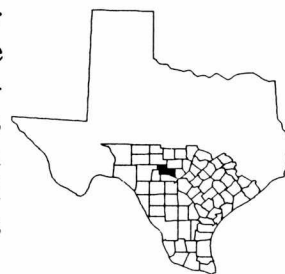
This boatstone is made of limestone. It was recovered from a comparatively small burned rock midden (about eight meters in diameter) in Kerr County near Kerrville. Two other lithic artifacts were found in direct association. One is a very thin triangular biface with convex edges and fine edge retouch (Figure 1, lower right). It is made of excellent quality brownish gray chert. Dimensions of this specimen are: Length, 99 mm; Width, 69.5 mm and uniformly 5 to 6 mm thick. It weighs 50.5 grams.

The other specimen is a complete Pedernales point (Turner and Hester 1985) made of very dark grayish-brown chert of excellent quality and workmanship. It has a glossy finish and waxy feel that indicates it has been heat treated. It is 81.7 mm long, 33.8 mm wide and 7.2 mm thick and weighs 16.8 grams.

These two artifacts were found in direct association with the boatstone. They were at the same level of excavation, in contact with each other and within two centimeters of the boatstone. This may indicate an earlier date for this boatstone than the Late Archaic dates Hall (1981) established for the boatstones at 41AU36. Turner and Hester (1985) give dates for Pedernales points of Middle Archaic time periods ca. 2000 B.C. - 1200 B.C.

The thin biface displays considerable polish along all edges with noticeable rounding of edges and flake arrises extending five mm from the edges. This is more pronounced along one edge where it extends 15 mm.

There is no crushing or microflaking of the edges. The most prominent wear evidence is along the lower 45 mm of the lateral edges and around the basal corners



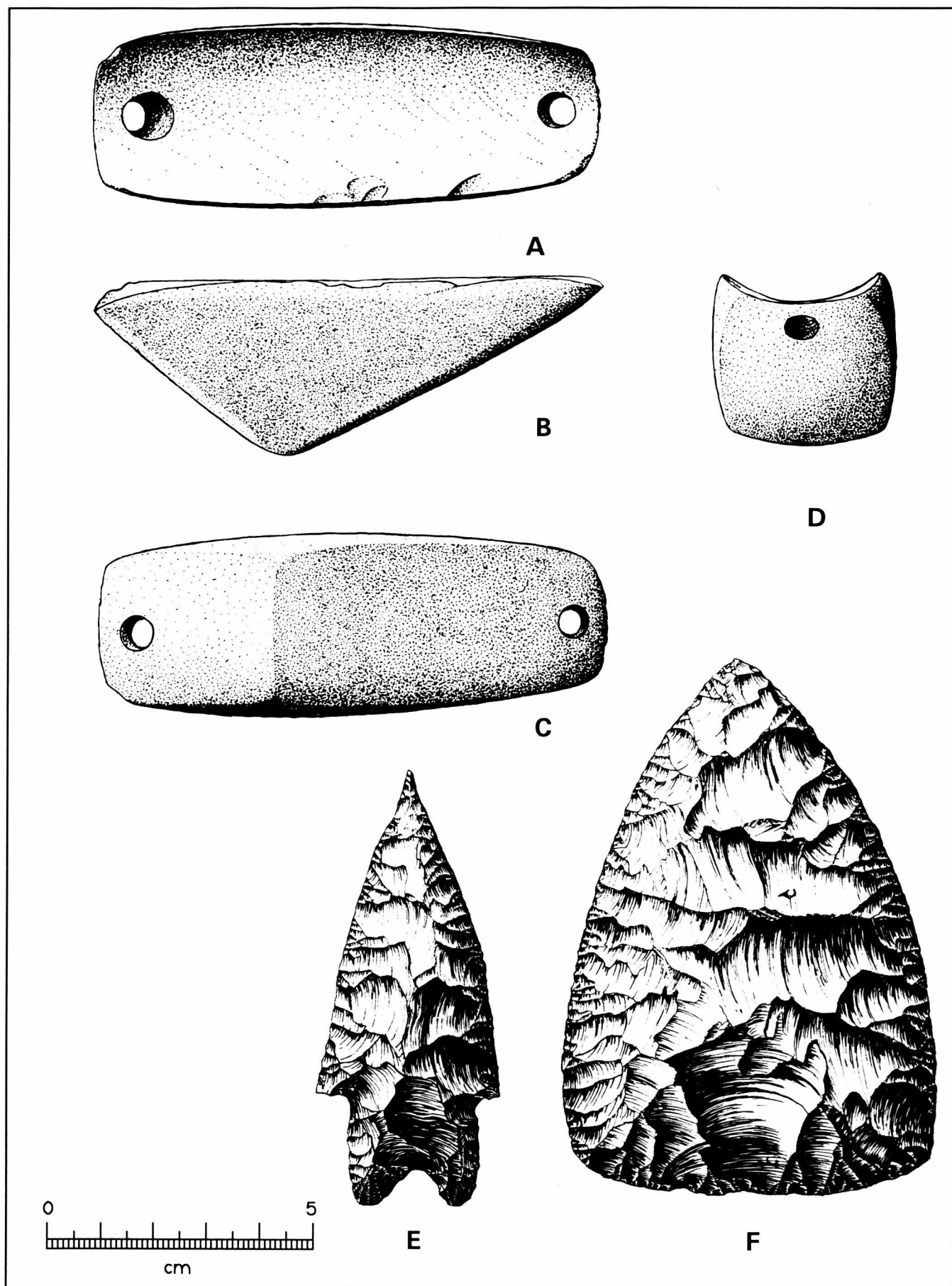


Figure 1. Four views of Boatstone with associated artifacts. A, base; B, side; C, keel; D, end view; E, Pedernales Point; F, thin biface.

on to the proximal edge. Both edges at the distal tip also show more wear and polish than do the central areas of edges. The absence of microflaking and edge crushing indicates exclusive use on a relatively soft material.

### DISCUSSION

Patterson's (1937) distributional study of boatstones in the four states of Arkansas, Louisiana, Oklahoma and Texas showed the greatest concentrations of these artifacts to be in southwest Arkansas. Most recorded in Texas were in the central and northeast areas of the state. He only recorded one from Kerr County. Of the many specimens illustrated by Patterson only one showed to have the greatest depth of the keel to be slightly off center of the long axis.

Hall (1981) in his study in the Cultural History of the Lower Brazos River Valley, established direct relationships between boatstones, corner-tang knives, marine shell ornaments, and incised bone objects at 41AU36, all in a Late Archaic deposit dated between 650 B.C. and A.D.

450. Of the boatstones illustrated, the greatest depth of the keel is located in the longitudinal center of the artifact.

The specimen reported here from Kerr County has this greatest depth of keel very much off center at near two-thirds toward one end. The significance of this anomaly is not known.

In determining the function of boatstones, Patterson (1937) suggested that many of them were used as atlatl weights. However, many boatstones weigh in excess of one pound and would be too heavy for this purpose. The Kerr County specimen reported here weighs 123 grams (less than four ounces) and with its basal groove and end holes for securement purposes would appear to function well as an atlatl weight.

### ACKNOWLEDGEMENTS

I wish to extend thanks to Steve Schwarz and Tony Harden for the loan of these artifacts for study and documentation, and to Richard McReynolds for the illustrations.

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## A COLOR CHART

*Malcom L. Johnson*

The purpose of this paper is to report the results of a quest to identify the colors that were used in an article describing various glass beads.

Several months ago the question was raised as to what types of beads would be appropriate to use to depict early Texas dress for living history reenactments, and whether any of the old historic types of beads were currently being manufactured. This led to an attempt to locate appropriate beads in manufacturers' catalogs, and that in turn led to a search of the literature to identify specific bead types that were in use during the early history of Texas. Since nearly all articles are published in black and white, an immediate problem developed; how to distinguish the colors of the various beads?

The most comprehensive paper on beads here in Texas, that the author is aware of, is one that was published some years ago. The paper is titled *Trade Beads, Projectile Points, and Knives*, by R. K. and Inus Marie Harris, in *A Pilot Study of Wichita Indian Archeology and Ethnohistory* edited by Robert E. Bell, Edward B. Jelks and W. W. Newcomb, (report to the National Science Foundation), 1967.

While this particular publication is not readily available in my area, a copy was eventually obtained through interlibrary loan.

In this publication the authors have established 184 types of glass beads which were excavated at several datable sites, and which also allowed them to establish a chronology of bead types that were used early in Texas history. Many of the distinguishing features that separate these bead types one from the other, are in their coloration. In identifying the bead types in their paper, Harris and Harris used a standard color chart by Bustanoby (*Principles of Color and Color Mixing* by J. H. Bustanoby, McGraw-Hill Book Company, Inc. 1947, Plate 8).

An effort to obtain a copy of Bustanoby's color chart through interlibrary loan several years ago had been unsuccessful. However, another effort was made a few months ago, and a copy was located in the Dow Chemical Company Library. At last I was able to actually see the 37 colors named in the Harris paper. The actual shade of many of these colors was unfamiliar to me, so I

had not been able to visualize what the beads actually looked like. Names like Sky Blue, Grape, Turquoise, etc. mean different shades of color to different people. Bustanoby explained how he obtained the specific shade of the various colors that he named in his chart. The color Grape, for instance, was matched from actual specimens of grapes of the Concord variety, which is a kind of grayish-blue instead of the purple hue many people associate with grapes (p. 51). This Turquoise was matched to museum specimens of clear blue Persian Turquoise (p. 83). The Gobelin Blue was matched to a blue color used by the French dyers, Gilles and Jean Gobelin about 1456 A.D. (p. 50), just to name a few.

After some consideration, I determined that while the Bustanoby color chart was in my possession, an effort would be made to obtain recent sample color chips that closely resembled the colors from the chart that were named in the Harris paper. After explaining to the manager of a local paint company what I was attempting to accomplish, I was provided sample color chips, and a table at which to work. A couple of afternoons were spent attempting to match the modern color chips as carefully as possible, to the colors on the 1947 Bustanoby color chart, with fairly good success. It must be kept in mind that the Bustanoby color chart was printed on glossy paper, with the entire color chart on a single page. The colors resulting from this method of printing are not necessarily exact reproductions of the colors they represent. Bustanoby even cautioned, "while every care has been exercised in reproducing original mixtures as faithfully as possible, a certain allowance must be made for slight variations in color printing" (p. 28). He also lamented that post-war shortages were still a problem. Consideration must also be given to the fact that the Bustanoby color chart is now 47 years old, and may have suffered some fading. The colors in the Bustanoby color chart cannot be matched to every bead precisely, as there are slight variations in the colors of the beads themselves. Even the shades of color used in modern made beads can vary. A visit to a local craft shop, and close inspection of the various colored beads, will clearly demonstrate why the beading instructors



## COLOR CHIPS FOR BEADS

The following modern color chips match fairly well with the Standard Color Chart published by Bustanoby (*Principles of Color and Color Mixing*, by J. H. Bustanoby, McGraw-Hill Book Company, Inc., 1947, Plate 8, which was used as a color reference in the article: Trade Beads, Projectile Points, and Knives, by R. K. and Inus Marie Harris. In: *A Pilot Study of Wichita Indian Archeology and Ethno-History* edited by Robert E. Bell, Edward B. Jelks, and W. W. Newcomb, 1967).

Unless otherwise noted, the paint-chip code numbers refer to Benjamin Moore & Co. paint chips.

<b>BLUEBIRD BLUE</b>	4/E 784 (Medium Blue)
<b>BRITTANY BLUE</b>	3/b 774 or D-16 D-71 Fulcolor by Fuller O'Brien Co.
<b>DELFT BLUE</b>	4/E 840
<b>GOBELIN BLUE</b>	3/D 748
<b>INDEPENDENCE BLUE</b>	5/F 826 (Flag Blue)
<b>NAVY BLUE</b>	5/f 833
<b>PEACOCK BLUE</b>	4/E 762 (Pony Trader Blue, Greasy Blue, Bodmer Blue)
<b>SKY BLUE</b>	2/B 837
<b>TURQUOISE</b>	2/B 724 (Persian)
<b>YALE BLUE</b>	5/E 798 (Oxford Blue)
<b>BOTTLE GREEN</b>	5/F 595
<b>EMERELD GREEN</b>	4/F 609
<b>FERN GREEN</b>	4/G 406
<b>MINT GREEN</b>	4/F 566
<b>OLIVE GREEN</b>	5/E 455
<b>COLONIAL YELLOW</b>	3/C 369
<b>DANDELION YELLOW</b>	4/G 350
<b>PUMPKIN YELLOW</b>	4/F 315
<b>SUNFLOWER YELLOW</b>	4/f 328

<b>AMBER</b>	May vary from light yellow to reddish-brown
<b>BABY PINK</b>	1/C 1303
<b>BRICK RED</b>	5/D 1203 (not on chart) (Matched to old bead)
<b>HARVARD CRIMSON</b>	5/G 1315
<b>MAGENTA</b>	4/G 1364
<b>PIMENTO</b>	5/G 1314
<b>RUBY RED</b>	85 SW1595 Sherwin Williams Co. (Ruby Gem)
<b>GRAPE</b>	4/E 832 (Concord Grape Color)

Also named in the report but not listed on the color chart are the following: Turquoise Blue, Light Pink, White, Light Grayish White, Grayish White, Bluish White, Milk Glass, Pearly White, Dark Bluebird Blue, Black

suggest purchasing enough beads at the same time to do the entire background color of a beading project. Often the color from one batch of beads to another will be noticeably different when used on a large area.

In order that I might have a color chart handy for my own personal reference, and also to allow other researchers to benefit from the time already spent on this project, the "Color Chips for Beads" pages were typed up. They list the colors that were named by Harris in describing the beads, and they list the modern code number of each sample color chip that I matched to Bustanoby's color chart, and the name of the company that produces them, as well as some other names sometimes used to describe the color. In order to have a fairly good Do-It-Yourself color chart to aid in your bead research, all you have to do is xerox a copy of each page, and then make a trip down to your favorite paint store or lumberyard and pick out the sample paint chips with the correct code numbers on them that correspond to the code numbers that are listed. These sample paint chips are supplied by the paint manufacturers, and are given away free. It adds a great deal to a paper to actually be able to see and appreciate the various colors of the beads. All you have to do is clip out a small portion of the color chip and glue it to the pages in the space provided between the name of the color and the code number. A small piece of the color chip is all that is needed, about 1/2" x 3/4", so about five or six pieces can be made from each color chip. A word of caution; several paint manufacturers make colors named Turquoise, Delft, Gobelin, Sky Blue, etc., but they do not necessarily match the colors on the Bustanoby chart. As a matter of fact some are so different that they appear to be a completely different color. So stick to the code numbers that are provided, unless you have a copy of the Bustanoby color chart to match them to.

To expand the idea of Do-It-Yourself color charts a little more, let me suggest that since there are so many colors, tints, shades, and hues of these sample color chips available, they may be useful in other applications as well. Not only can the colors of beads be matched, but there are also colors of ceramics and glazed ware, colors of prehistoric pottery, colors of rock art, colors of painted pebbles, paint traces on old buildings and ships, and, I am sure, many more applications.

As an example, let's say that a tracing or

drawing of a pictograph was done out in the field in some remote area, and the surveyor had a set of the earth tone sample color chips with him. He could match the color chips to the various areas of the pictograph and make a note of the code number of the color chip at the appropriate location on the drawing. Ink drawings could then be published in black and white with the code notations on them. Then any other researcher could render a very nearly correct reproduction in color, at home or in the lab, in any part of the country, if they so desired. And this could be done at a small fraction of the cost of publishing a report with color photographs.

The most important thing to remember in case you decide to give this color matching a try, is to always use color chips that are readily available to the general public. For example, the Federal Government publishes a booklet with color chips of military colors and the Federal Specification numbers. These are used by manufacturers who must paint military components to match very exact colors. But very few people have copies of these publications unless they are manufacturers.

Some Geologists and Mineralogists use a color chart of rock colors that is based on the Munsell system. Color chips may be purchased from the Munsell Color Company, 2441 North Calvert St., Baltimore MD 21218. In addition, color names for colors that fall outside of the range of rock colors can be found in the U. S. National Bureau of Standards Special Publication SP 440, "Color, universal language and dictionary of names," (1976) available from the Superintendent of Documents, Washington D.C. 20402. These color charts based on rock colors would appear to have numerous applications within the field of archaeology, although it may take some training to be able to use the number and letter type designations for color that this system requires. The Munsell system is evidently widely accepted in the United States.

Just keep in mind that the colors that were named by Harris and Harris in their paper on beads refers ONLY to the actual colors that were printed on the Bustanoby color chart, so as not to confuse the colors with different shades of colors of sky blue, turquoise, etc., being sold by various manufacturers today.

With a little thought and imagination, I am sure that all sorts of applications for these Do-It-Yourself color charts will come to mind.

## **STEMMED POINTS WITH MASSIVE BARBS FROM THE LOWER RIO GRANDE VALLEY**

*C. K. Chandler and Don Kumpe*

### **ABSTRACT**

A collection of large stemmed points with massive barbs from Starr and Zapata Counties in the Lower Rio Grande Valley is documented and discussed. These points are typologically and technologically identical to the Bell and Andice types found in central and east Texas and have considerable similarity to the Calf Creek type found in Arkansas and Oklahoma.

### **THE ARTIFACTS**

This collection consists of 45 specimens, many of which are too fragmentary for firm classification. At least nine are sufficiently intact for firm length measurements. These range from 35 mm to 69 mm in length for an average of 44 mm. Eleven specimens have at least one surviving barb. Accurate width measurements on these were not possible. Thickness measurements were obtained for all specimens and these ranged from 4mm to 7 mm with only one being 7 mm thick. The average thickness is 5.33 mm.

Figure 1 illustrates 12 of these specimens at actual size, and 11 of these have one surviving barb. Specimens A through H are identified here as Bell points and Specimens I through L are identified as Andice.

Of the 12 illustrated specimens, A, B, E, F, G and H are from 41SR172 in Starr County. Specimens C, D, and I are from 41SR174 in Starr County, and Specimens J and K are from two unrecorded sites in Zapata County. Specimen L is from 41ZP83 in Zapata County.

### **DISCUSSION**

The Bell point type was first defined by Sorrow, Shafer and Ross (1967) at Stillhouse Hollow in central Texas, and this area continues to be where they are most common. Over time, their distribution has been expanded and their chronological placement well established.

Chandler (1983) reported both Bell and Andice points in the central coastal area near Corpus Christi.

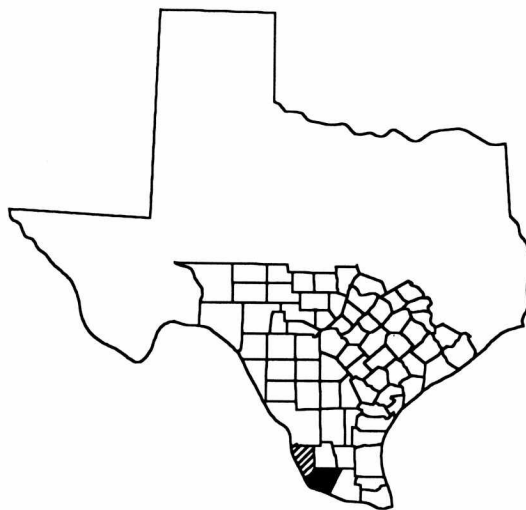
Saunders (1985) illustrates a wide variety of lithic artifacts (mostly projectile points) collected from the Falcon Lake shoreline in Starr and Zapata Counties and there is one fragmentary "Bell" point illustrated, but he does not specify which county it came from.

Shafer (1986) reports Bell points associated with other barbed points of the Baker and Bandy types as characteristic of the Baker Interval along the Lower Pecos. These are among the earliest types found in the Lower Pecos. The Baker Interval is established as 8,500 to 5,000 years ago.

Prewitt (1981) places Bell and Andice points in the Jarrell Phase of the Early Archaic of central Texas with estimated ages of 4050-3050 B.C.

Bell points have also been reported in the lower Panhandle area of Crosby County along the eastern edge of the Llano Estacado (Parker and Mitchell 1979).

Calf Creek points are named for the Calf Creek cave site in Searcy County, Arkansas. These points were recovered from the earliest occupation zone excavated (Dickson 1970). Their remarkable similarity to the Bell and Andice points in Texas suggest we are dealing with an Early Archaic



**Figure 1. Texas map. Starr County solid, Zapata County striped.**

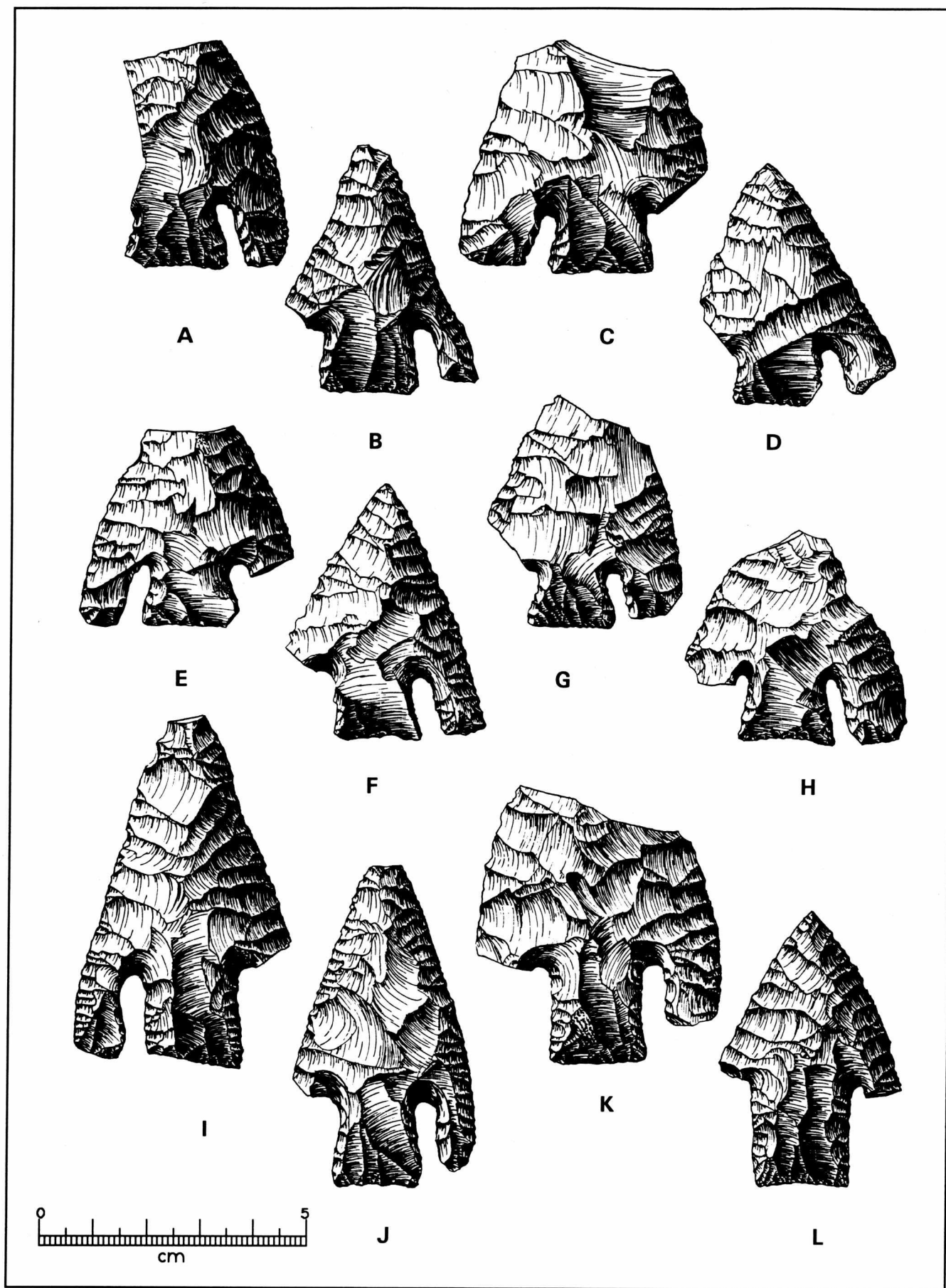


Figure 1. Stemmed points with massive barbs from the Lower Rio Grande Valley.



series of very similar age with a much greater distribution than we are presently aware of.

The occurrence of Bell and Andice points along the Lower Rio Grande in deep South Texas great-

ly expands their known distribution and suggests they are of similar age to these point types in other areas of Texas.

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## NAGGING TIME



Where are your manuscripts? I know you have been working on some archaeological project -- in spite of the summer heat -- and *La Tierra* is waiting for a report. Remember that the prehistoric evidence of man's occupation in Texas, as well as the native Indian, is only part of the picture. The Europeans moved into this area to establish permanent urban settlements, erecting log cabins, stone houses, mills and factories, many of which still stand. These settlements are also of archaeological significance and should be considered for manuscript material.

Get your field notes together and write up your project so that we may all enjoy the work. Reports are still needed for Volume 20, Number 4, *La Tierra*.

Editor

# ***THIRD INTERIM REPORT ON THE FOX DRAW SITE (41GL175): A PALEO-ARCHAIC MIDDEN SITE IN GILLESPIE COUNTY, TEXAS***

***R. K. Saunders***

## **ABSTRACT**

This report describes the continuing excavation of a shallow midden site in Gillespie County, Texas. Three previous reports of results found in Phases 1 through 3 were published by the author in 1986, 1988 and 1990. As in the first three reports, most of the artifacts found during Phase 4 are believed to have been made during the Archaic period but evidence of even earlier occupations continues to surface. A polyhedral core was found which is believed to be Paleo-Indian. Points that may be Angostura and Plainview were also found which support this conclusion. Selected artifacts are described and illustrated.

## **INTRODUCTION**

A description of the site and the excavation procedures can be found in Saunders (1986). The site is located on a tributary of the Thredgill Creek drainage in Gillespie County, Texas. As stated previously, the prime objective of these interim reports is to document as much information as possible about clues to the life-style of Early Man. But what should an interim report include? Should point types or other artifacts that have been discussed in previous reports be eliminated from this report? It should be obvious that duplicate point styles will be found in an excavation of this size but each will have its own characteristics which should be seen and appreciated. It seems that illustrations of the projectile points should allow the readers to form their own opinion about the morphology and possible age of an artifact. Several unique, and possibly some duplicate items, will be briefly discussed and illustrated. All the illustrations were drawn by the author, which is another incentive for the artifacts to be seen in addition to the compelling desire to "show and tell."

Phase 4 was very productive in the amount of diagnostic materials recovered, indicating a move toward the average center of occupational activity. The gravel layer, nearly sterile, was much deeper

than in Phase 3, which allowed for a thicker deposition layer below the plow zone. There is strong evidence that the plow zone does not extend below 20 centimeters. There is a solid layer of midden rock around 20 centimeters in depth that appears to be inviolate. Anything found deeper is considered to be undisturbed. No large turning plows have ever been used in the field where the site is located. Plowing is done with small gang disc plows due to the extremely rocky nature of the soil, even outside the midden rock area.

## **PROCEDURE**

Two previous reports (Saunders 1986, 1988) contain discussions of the standard excavation procedures used and will not be repeated here. Figure 1 is a map of Texas showing the location of Gillespie County. Figure 2 shows the grid layout and excavation sequence for all the units involved through Phase 4. Phase 4 was carried out April 15 through April 25, 1987. Table 1 is a cross reference of Unit designations for Phase 4 showing the original letters and numbers used versus a more standardized method of identification. The original method will be discontinued in the future in favor of the standard version. Some

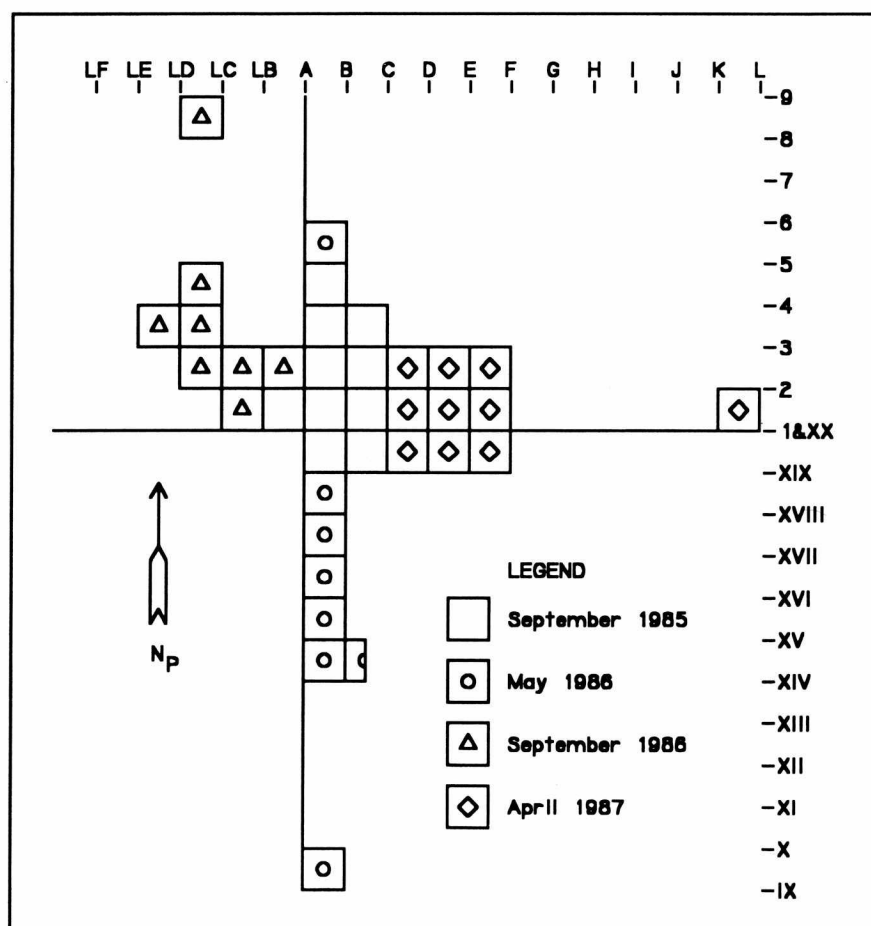


**Figure 1. Texas map showing location of Gillespie County (darkened area).**

**Table 1. Unit Designation Conversion Table.**

<u>Original</u>	<u>Standard</u>
C-XIX	N-19, E-2
C-1 and XX	N-20, E-2
C-2	N-21, E-2
D-XIX	N-19, E-3
D-1 and XX	N-20, E-3
D-2	N-21, E-3
E-XIX	N-19, E-4
E-1 and XX	N-20, E-4
E-2	N-21, E-4
K-1 and XX	N-20, E-10

Base line is N-20 (twenty meters from alpha datum) and the median line is East and West Zero (E-0 or W-0). Unit coordinates are read from the southwest corner in all cases.

**Figure 2. Site 41GL175 excavation sequence, Phase 4.**

eleven phases have been completed as of May 1993, which is the date of this report. The nearly six years delay should give one an idea of how far behind the author is in reporting the results of his work.

Since it was anticipated that reporting would lag somewhat behind the excavations, a strong effort was made to keep good records and to make numerous photographs. Hopefully, this delay will not continue because no further work is planned at the site.

Chert debitage from each level in each unit was weighed and the vertical distribution is shown in Table 2. Snails from only one unit (K-1) were very scarce and were not counted but weighed, which is shown in Table 3. All projectile points, regardless of condition, are described and illustrated actual size. Other artifacts are discussed but may not be illustrated.

### THE ARTIFACTS

Two portions of a large fractured metate and an oblate oval spheroid mano having a fortuitous hand-hold on the reverse side were found in Unit C-1 (N20,E2) in the 30-40 cm level (Figure 3). Three nearly spherical nodules were found near the mano in this same level. While these three did not show a polished surface like the oval mano, they could also have been used in food processing on the metate. Perhaps they were the tools of an Archaic Cuisine-Art.

Surely, the most significant find of this phase was the large polyhedral blade core previously described in *La Tierra* (Collins and Headrick 1992; see also Collins 1990). A small blade core companion was also found in the same unit (Figure 4). While much smaller than its larger companion, there is evidence that some thin blades at least 5 cm long were removed. It is not believed to be an exhausted large blade core because there is still cortex on some of the plane surfaces.

The most unusual find was several roughly spherical clay (?) balls about 5 cm in diameter which appeared to have been baked (?). They were found in the 30-40 cm level of Unit E-2 (N21,E4). Their color was very different from the normal soil matrix in this level. A black deposit at several places on the surface of the objects is believed to be carbon.

Fired clay balls are common in southeastern Texas and are thought to have been made and

used in the Mississippi Valley from the Middle Archaic through the Woodland time period (Patterson 1975). Their presence in Central Texas can only be speculated. The native Americans at Poverty Point, Louisiana used baked clay balls as a substitute for rocks as a heat transfer method in their food preparation. Rocks are very scarce in the Mississippi alluvium near Poverty Point so some means of heating liquids had to be devised (from conversations with Poverty Point Park personnel). Rocks are not scarce in Central Texas, so some nebulous other uses for baked clay balls are indicated. How about a neutralizing or medicinal or flavoring agent when used in hot drinks or stews?

At present, there are some 94 named projectile point types found in Texas (Turner and Hester 1993). Of this number, only 48 show distribution patterns which could possibly include Gillespie County. At this writing, a total of 22 types have been identified as coming from 41GL175. A listing is shown in Table 4. The occurrence in Gillespie County for 20 of these is in agreement with the published distribution patterns, but two appear to be intrusive from other known distributions.

Due to poor mental retention by the author, it has always seemed desirable to have the artifact illustration on the same page as the remarks, measurements, etc., similar to the format used by Jim Mitchell in the article by Woerner and Highley (1983) in Vol. 10, No. 1 of *La Tierra* on Brom Cooper's collection.

Therefore, after consulting the Editor and Production staff of *La Tierra* and obtaining tentative permission, the artifacts from Phase 4 are shown and described in an arbitrary, random order on the same page. The groupings were dictated by the configurations of the artifacts and the desire to optimize the space available on a page. It is hoped that the results meet with the reader's approval.

In order to eliminate possible misunderstanding, the following is a list of the abbreviations used in describing the artifacts. All values are in millimeters or grams. (L)=Total artifact length; (BW)=Maximum body width; (T)=Maximum body thickness; (SL)=Stem length; (SW)=Stem width (avg. or min. to max.); (Wt)=Weight; (est.)=Estimated; (?)=unknown, unable to measure or determine; (CA)=Circa-around-approximately.



**Table 2. Vertical and Horizontal Distribution of Chert Debitage**

Unit	K-1 N20,E10	C-1 N20,E2	C-XIX N19,E2	D-XIX N19,E3	D-1 N20,E3	E-1 N20,E4	E-2 N21,E4	E-XIX N19,E4	D-2 N21,E3	C-2 N21,E2
Level	Ounces									
0-10	29	29.5	22.5	40	32	27	24	41	--	--
10-20	37	39	21	15	19	18	20.5	39	--	--
20-30	46	46.5	44	75.5	104	105	109.5	31	--	--
30-40	10	92	58	75.5	60	81	44.5	20	--	--
40-50	2	3.5	--	--	--	--	--	--	--	--
0-40							--	--	186	161
Total										
Ounces	124	210.5	145.5	206	215	231	198.5	131	186	161
Pounds	7.8	13.2	9.1	12.9	13.4	14.4	12.4	8.2	11.6	10.1

Amounts shown were recovered using 1/2-inch screens except in Unit K-1 where a 1/4-inch screen was used. Total amounts will be less than the amount of chertdebitage actually present due to loss of the fine thinning flakes using the 1/2-inch screens.

Total amount of chertdebitage recovered was 113.1 pounds.

**Table 3. Vertical Distribution of Snails in Unit K-1**

<u>Level (cm)</u>	<u>Grams</u>
0-10	0.9
10-20	15.2
20-30	50.6
30-40	36.9
40-50	15.2
Snails were not measured or counted in the other Units since most would be lost through the use of 1/2-inch screens.	



**Table 4. Projectile Points and/or Knives Found in the Four Phases of Excavation at 41GL175.**

TYPE	PERIOD	MEAN*	NUMBER FOUND
1. Friday Biface	Prehistoric	A.D. 950	2
2. Darl	Trans-Archaic	A.D. 500	2
3. San Gabriel Biface	" "	A.D. 375	1
4. Montell	Late Archaic	400 B.C.	1
5. Refugio	" "	500 B.C.	1
6. Lange	" "	650 B.C.	2
7. Gary	" "	875 B.C.	1
8. Kent	" "	1100 B.C.	1
9. Marshall	" "	1250 B.C.	2
10. Palmillas	" "	1400 B.C.	2
11. Tortugas	Middle Archaic	1550 B.C.	4
12. Pedernales	" "	1600 B.C.	7
13. Langtry	" "	1750 B.C.	8
14. Kinney	" "	1750 B.C.	1
15. Almagre	" "	1750 B.C.	1
16. Travis	" "	2350 B.C.	4
17. Bulverde	" "	2750 B.C.	10
18. Nolan	Early Archaic	3250 B.C.	8
19. Early Triangular	" "	3650 B.C.	1
20. Martindale	" "	4250 B.C.	1
21. Wells	" "	4250 B.C.	2
22. Zorra	" "	4250 B.C.	1
23. Texas Angostura	Late Paleo-Indian	6090 B.C.	2
24. Plainview	"	8080 B.C.	1
Total			66

\* The MEAN is the mid-point of the suggested age span.

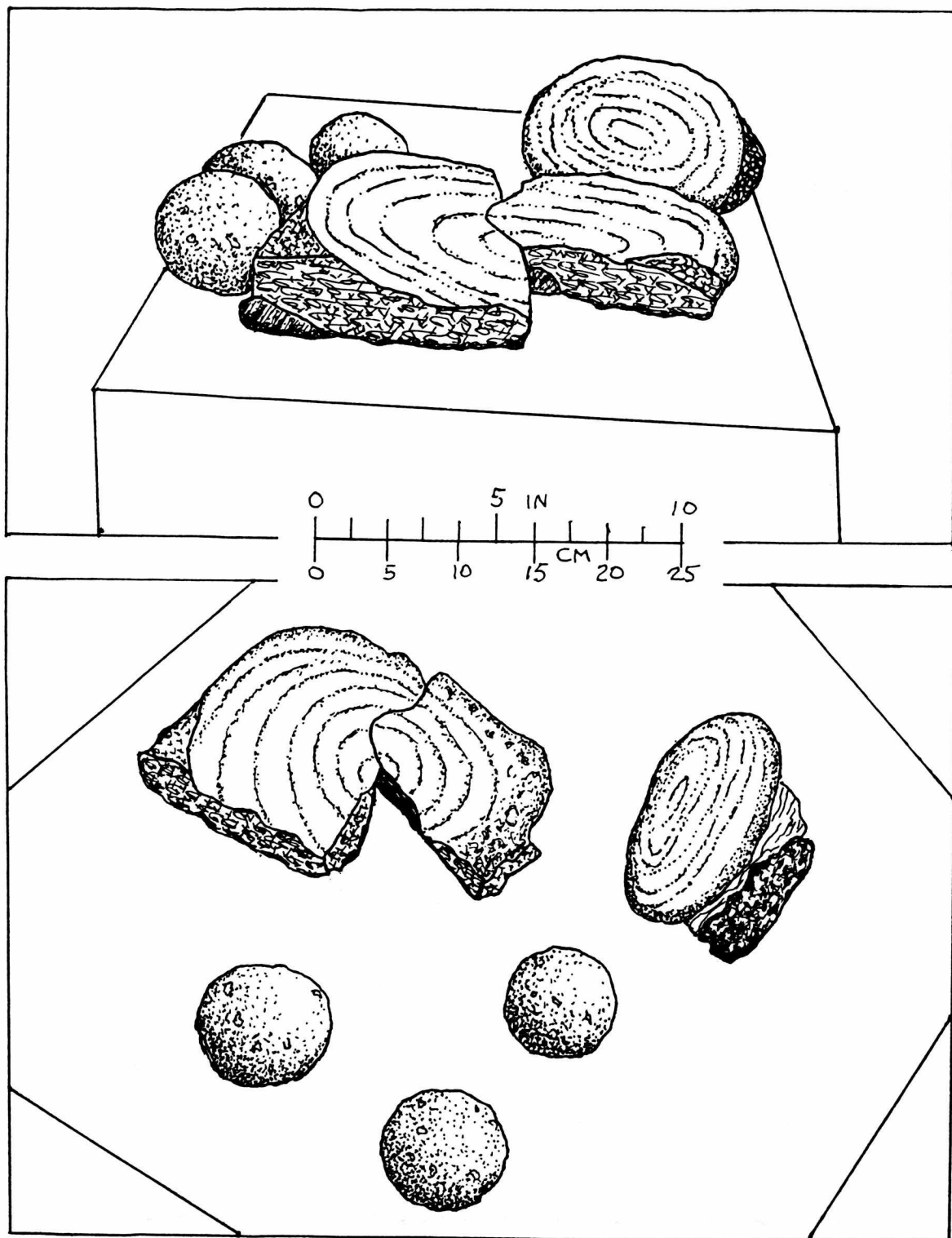
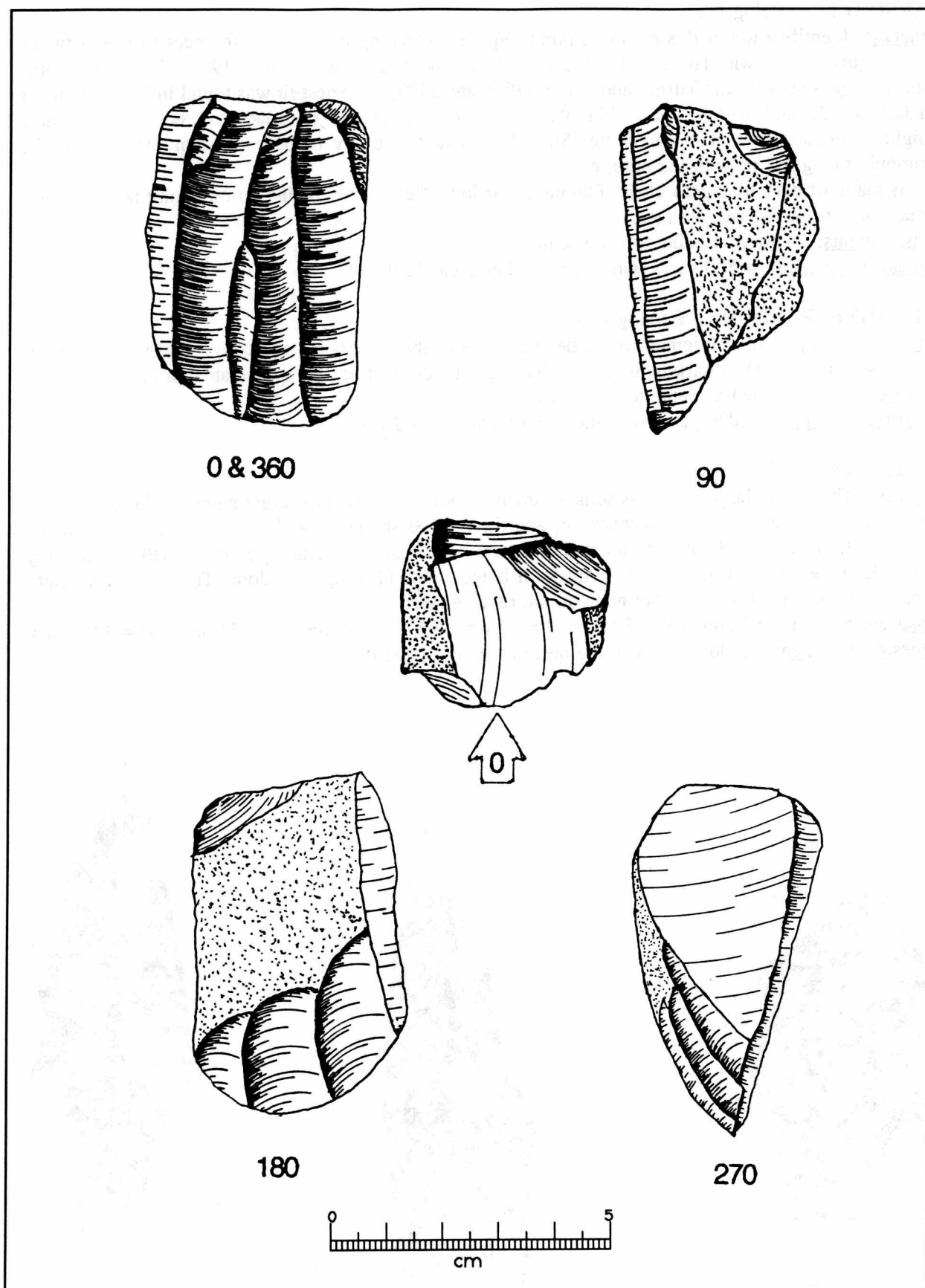


Figure 3. A large fractured metate and an oblate, oval, spheroid mano, with three sphere-like nodule "attachments." Found in Unit N20, E2 in the 30-40 cm level. "An Archaic Cuisine-Art."



**Figure 4.** A 360-degree View of Small Blade Core at 41GL175. Rotation is clockwise when viewed from the top.

**MARSHALL: Catalog # 22**

Remarks: Identification of this fractured point required searching numerous references to find a fit for the configuration shown. These were: Suhm, Krieger and Jelks (1954), Bell (1958), Suhm and Jelks (1962), Hughes (1972), and Turner and Hester (1985 and 1993). The best fit was found in Suhm, Krieger and Jelks (ibid.) and in Bell (ibid.): "the blade varies from triangular to broad oval, edges from nearly straight to greater part of a semicircle. Shoulders always strongly barbed; the more massive barbs commonly being in line with the base, etc."

It is made of dark blue-gray chert. Flaking is random. Very heavy patina on one body face but only a small amount on the reverse face.

Measurements: Omitted as being too conjectural.

Suggested age span: 4,500 years with the mean being ca. 1250 B.C.

**REFUGIO or PANDORA: Catalog # 14**

Remarks: This proximal fragment could be either one of these types but the convex base seems to opt for Refugio. It is made of dark beige chert. Flaking is random. It has no appreciable patina.

Measurements: Omitted as being too conjectural.

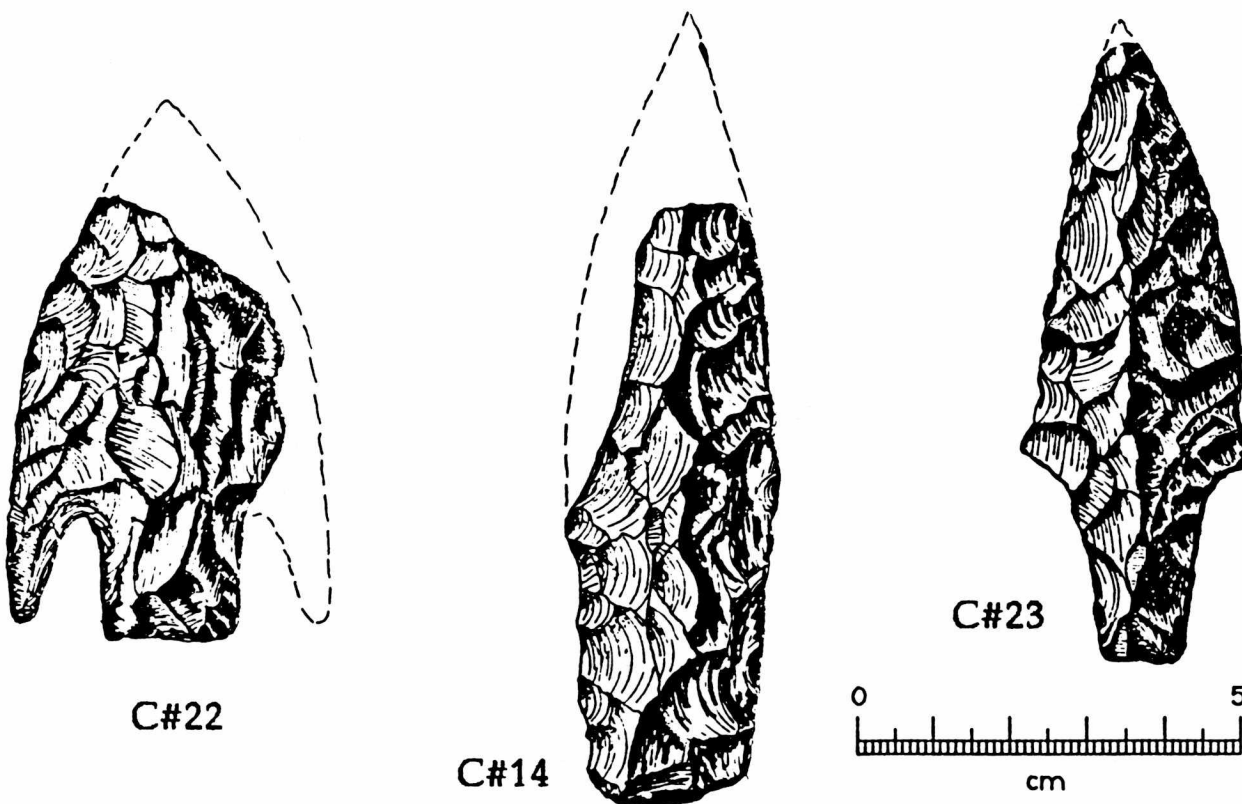
Suggested age span: 3,000 years with the mean being ca. 500 B.C.

**KENT: Catalog # 23**

Remarks: This rather large point has some of the morphology of three different named points. The stem says Langtry, the length says Pontchartrain, and the pointed shoulders and long, slender body say the odds favor Kent. Also, a Pontchartrain would have to be intrusive since the type is normally found only in deep East Texas and Louisiana. It is made of beige chert. Flaking is random. There is a very light patina on the obverse body face but none on the reverse face.

Measurements: L=85 mm, BW=30 mm, T=6.7 mm, SW=11-18 mm, SL=23 mm, Wt= 14.0 gms.

Suggested age span: 2,800 years with the mean being ca. 1000 B.C.



**PLAINVIEW (?)**: Catalog # 18

**Remarks:** It sure would help if Early Man had had some means of dating his work. If one is to be unbiased, it seems necessary to explore the "pros" and "cons" of the diagnostic features found for this point.

The "Pros": The base is slightly concave, ca. 1 mm, and it has been thinned by the removal of small vertical flakes. The lateral edges exhibit some smoothing but are not heavily ground up to the body mid-point. The overall shape and size are about right. There is heavy patina on the obverse body face and most significantly, it was found in the same unit as the polyhedral blade cores which belong to the Paleo-Indian age (Collins 1990).

The "Cons": The flaking is random. The upper body lateral edges appear to have been resharpened. Workmanship is not good and overall appearance is crude.

The "pros" seem to outweigh the "cons" but it is obviously a "gray area" Plainview. It is made of light brown-gray chert.

**Measurements:** L=57.4 mm, BW=24.6 mm, T=8.0 mm, Wt=121.1 gms.

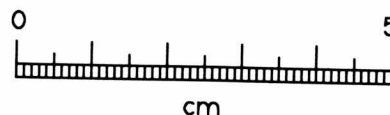
**Suggested age span:** 140 years with the mean being ca. 8080 B.C.

**MARTINDALE**: Catalog # 12

**Remarks:** This point was badly fire-spalled but seems to fit the published description of the type. It is made of very dark brown chert. It has a white deposit—from the fire (?)—on the reverse body face.

**Measurements:** Omitted as being to conjectural.

**Suggested age span:** 3,500 years with the mean being ca. 4250 B.C.





**LANGE:** Catalog # 25

Remarks: The outline extrapolated from the contours of this proximal fragment yields an image quite similar to published examples of the Lange type. The type is common in Central Texas. It is made of black chert. Flaking is random. It has only a trace of patina on one body face.

Measurements: Omitted as being too conjectural

Suggested age span: 700 years with the mean being ca. 650 B.C.

**FRIDAY BIFACE:** Catalog # 21

Remarks: This artifact has all the attributes prescribed except for the sharply pointed tip which has been broken off. It is made of light gray, fine grained chert. Flaking is random. It has heavy patina on one body face.

Measurements: L(est)=90 mm, BW=48 mm, T=8.8 mm, and Wt=32.5 gms.

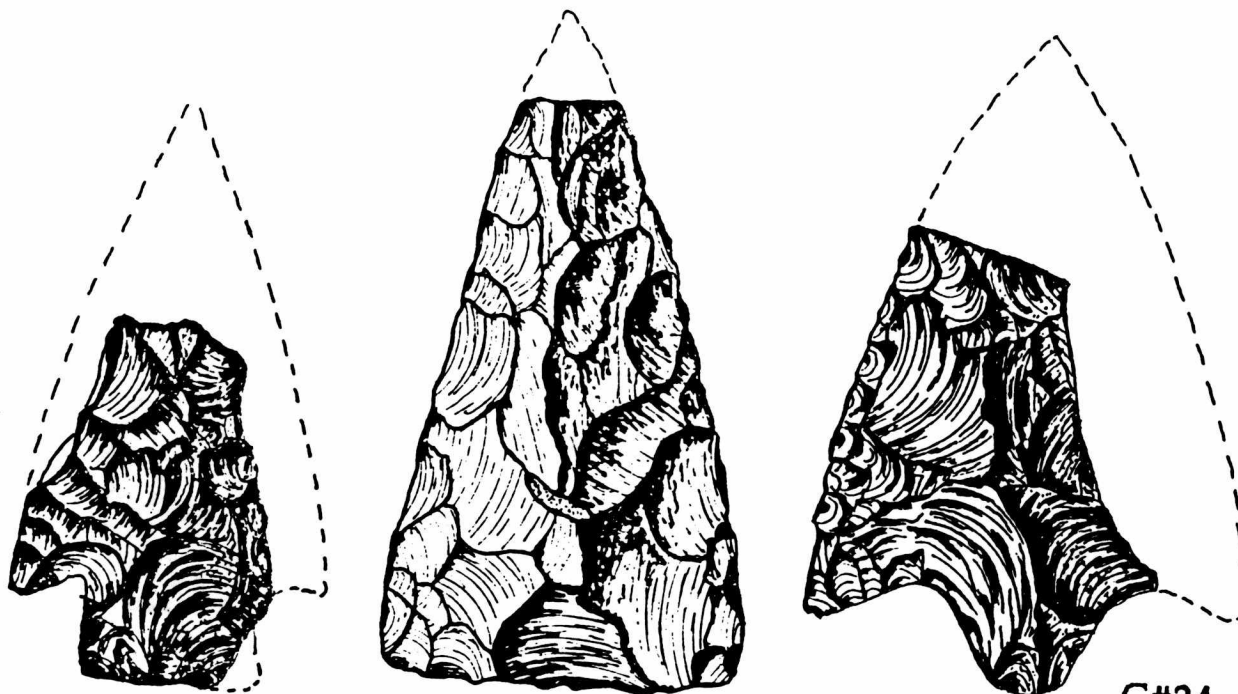
Suggested age span: 1,300 years with the mean being ca. A.D. 950.

**ALMAGRE:** Catalog # 24

Remarks: The extrapolated outline shown for this proximal fragment is very similar to the outline of the example of the type shown on page 70 of Turner and Hester (1993). It is made of dark gray chert. Flaking is random. The body is very thin. It has a small amount of patina on the obverse body face but none on the reverse face.

Measurements: Omitted as being too conjectural.

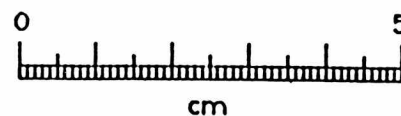
Suggested age span: 1,500 years with the mean being ca. 1750 B.C.



C#25

C#21

C#24



**TORTUGAS: Catalog # 13**

Remarks: This stemless triangular point fits the description for the type found in Turner and Hester (1993) having almost the exact dimensions of the largest example they show for the type. It is made of gray chert. Flaking is random. The base is straight and well thinned. The obverse body face has a very heavy patina but the reverse face has only a moderate patina.

Measurements: L=64 mm, BW=32.5 mm, T=6.4 mm, and Wt=13.6 gms.

Suggested age span: 1900 years with the mean being ca. 1550 B.C.

**PREFORM-TEXAS ANGOSTURA(?): Catalog # 10**

Remarks: This artifact is believed to be the preform of a Texas Angostura. It was probably discarded because the body width could not be maintained while reducing the thickness to an acceptable level. It is made of mottled dark gray and white chert. The white may be patina spots.

Measurements: L=104 mm, BW=33 mm, T=17.5 mm, and Wt=48.4 gms.

Age: (?)

**TORTUGAS: Catalog # 8**

Remarks: The distal end of this artifact was unfortunately broken off during excavation. It is a stemless triangular point very similar to Catalog #13. It is made of a dark brown flint with white chert inclusions. The obverse body face is heavily patinated with only a little on the reverse face.

Measurements: L(est)=70 mm, BW=28.5 mm, T=7.6 mm and Wt=12.6 gms (as is), 13.9 gms (calculated from integrated area).

Suggested age span: 1,900 years with the mean being ca. 1550 B.C.



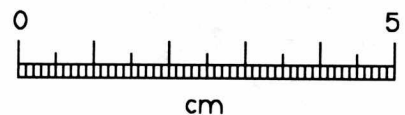
C#13



C#10



C#8



**KINNEY:** Catalog # 11

Remarks: This triangular point with a slightly concave base fits the type description criteria and shows apparent use on the right lateral body edge of having been used as a knife. Most observers believe the configuration to be a knife rather than a projectile point. It is made of light beige chert with white inclusions. Flaking is random. Fairly heavy patina on both body faces.

Measurements: L=73 mm, BW=31 mm, T=7.3 mm, and Wt=15.8 gms.

Suggested age span: 1,500 years with the mean being ca. 1750 B.C.

**LANGTRY:** Catalog # 6

Remarks: This proximal fragment exhibits a very thin cross section, BW/T= 7, which is a characteristic often found for this point type and which is an attribute which may well have contributed to its ruin. It has no signs of use and appears to have been broken during manufacture while attempting to remove a small "knot" on the obverse body face. The convex lateral edge also shows that the finishing touches were incomplete when the catastrophic fracture occurred. It is nicely made of a tan-gray chert. Flaking is random. It has fairly heavy patina on both body faces.

Measurements: L=(?), BW=52 mm, T=7.4 mm, SL=19 mm, SW=14.0 mm, and Wt=(?).

Suggested age span: 1,500 years with the mean being ca. 1750 B.C.

**BULVERDE:** Catalog # 16

Remarks: This fire-spalled point has convex edges rather than straight as in Catalog #15 but the "keystone" shape of the stem identifies it as a Bulverde. It is made of light brown chert with charcoal stains from the fire. There is heavy patina on the obverse body face but only a little on the reverse face. Flaking is obscured by fire damage but it is probably random.

Measurements: L=70 mm, BW=34.3 mm, SL=17 mm, SW=16.7-19.5 mm, T=6.7 mm and Wt=14.3 gms.

Suggested age span: 500 years with the mean being ca. 2750 B.C.



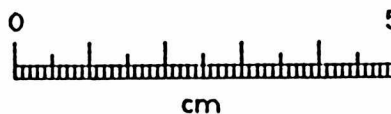
C#11



C#6



C#16



**ZORRA: Catalog # 7**

**Remarks:** This proximal fragment has unifacial beveling on the left edge of the stem which extends up the left lateral edge of the obverse body face. It is made of off-white chert. Flaking is random. One body face is lighter than the other (patina?).

**Measurements:** L=(?), BW=27 mm, SW=13.5-17.3 mm, T=7.3 mm and Wt=(?).

**Suggested age span:** 3,500 years with the mean being ca. 4250 B.C.

**LANGTRY: Catalog # 20**

**Remarks:** This complete specimen has the classic shape prescribed for the type but is 30% longer than most published examples. It is made of top quality dark brown "local" flint. Flaking is random. There is a trace of patina on one body face.

**Measurements:** L=91.2 mm, BW=40.0 mm, SW=14.7 mm, SL=17.7 mm, T=7.6 mm and Wt=23.1 gms.

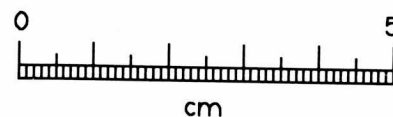
**Suggested age span:** 1,500 years with the mean being ca. 1750 B.C.

**BULVERDE: Catalog # 15**

**Remarks:** This point has the classic shape of the type although one barb and a small part of the distal end are missing. It is made of a dark brown and tan chert. Flaking is random. There is modest patina on the obverse body face and a very small amount of patina on the reverse side.

**Measurements:** L(est.)=75 mm, BW=33 mm, SL=16 mm, SW=13-18 mm, T=7.0 mm, and Wt=12.5 gms.

**Suggested age span:** 500 years with the mean being ca. 2750 B.C.

**C#7****C#20****C#15**

**DARL:** Catalog # 9

Remarks: This long, slender proximal fragment fits the type description criteria except for the stem and the extrapolated body length being somewhat longer than any of the published examples. It is made of dark beige chert. Flaking is random. No patina on either body face. The stem edges are unground.

Measurements: L=(?), BW=19.5 mm, T=8.9 mm, SW=12.5 to 15.8 mm, SL=28 mm and Wt=(?).

Suggested age span: 400 years with the mean being ca. A.D. 500.

**LANGTRY:** Catalog # 19

Remarks: This complete specimen has the classic shape prescribed for the type. It is made of beige-off white chert. Flaking is random. A small amount of patina is present on one of the body faces.

Measurements: L=77.4 mm, BW=41.2 mm, T=9.2 mm, SL=18.0 mm, SW=15 mm and Wt=16.8 gms.

Suggested age span: 1,500 years with the mean being ca. 1750 B.C.

**PEDERNALES:** Catalog # 2

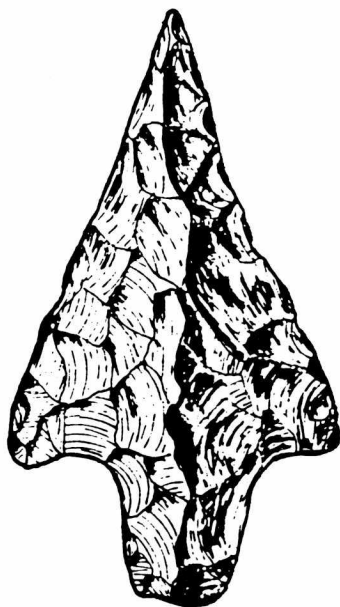
Remarks: This proximal fragment of a common Central Texas type was made of a dark brown "local" flint. Flaking is random. It has a very light patina on one body face only.

Measurements: Omitted as being too conjectural.

Suggested age span: 800 years with the mean being ca. 1600 B.C.



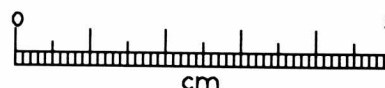
C#9



C#19



C#2





**TEXAS ANGOSTURA:** Catalog # 5

**Remarks:** Perhaps a better name for this point would be "agnostos" meaning unknown or unknowable in Greek. This point has some of the characteristics of five named leaf-shaped points. The candidates are: Angostura, Texas Angostura, Lerma, Refugio and Pandora with ages ranging from Paleo-Indian to Late Archaic.

Unfortunately, the proximal end of this point appears to be damaged as though broken out if its hafting. This makes it appear to have a short stem although it might be the upper portion of ground edges. Since none of the candidates are known to have stems, the latter option seems preferred. The damage prevents the use of an unfailing attribute of the Texas Angostura which is the 10 to 17 mm slightly concave base (Kelly 1983).

One could probably argue the case for any one of the five because the diagnostic parameters are so vague—not sharply outlined or separable that there is always room for doubt.

Without any absolute method of dating, perhaps the best method for resolving the problem is to use a method of association. Are there other contextual artifacts in association that have less ambiguous characteristics and are therefore more likely to be identified correctly? In this case, a polyhedral blade core was found in the adjacent unit and two possible Plainviews were found in adjacent units only four to six centimeters deeper. Is this indirect proof: Reduction Ad Absurdum??

Not to be dissuaded, the association seems to justify taking the benefit of doubt and saying that the point is a Texas Angostura.

It is made of dark gray chert with marbled white markings which could be patina. It also has some oblique-parallel flaking on the obverse body face.

**Measurements:** L(questionable)=80 mm, BW=25 mm, T=8.2 mm, and Wt=15.6 gms.

**Suggested age span:** 1,527 years with the mean being ca. 6091 B.C.

**PALMILLAS:** Catalog # 3

**Remarks:** This impact-fractured point has the stem of a Godley and possibly a Trinity but its length, stem and body shape more nearly conform to the outlines of a Palmillas. It was made of chocolate brown "local" flint. Flaking is random. It has light patina on one body face only.

**Measurements:** L(est.)=67 mm, BW=25 mm, SL=(?), SW=17 - 23 mm, and Wt=(?).

**Suggested age span:** 2,200 years with the mean being ca. 1400 B.C.



**UNCLASSIFIED: Catalog # 17**

Remarks: This small point is made of white chert or it is totally patinated on both sides of the body. Flaking is random. It is well made but very small for a dart point. Stratigraphy prohibits calling it an arrowhead. It was found in the same unit and at the same level that a possible Plainview point was found. It could possibly be a much larger artifact that had been resharpened many times.

Measurements: L=44.7 mm, BW=21.0 mm, T=6.0 mm, SL=21.0 mm, SW=11-17.6 mm, Wt=5.3 gms.

Age: Too uncertain to call.

**GARY: Catalog # 1**

Remarks: This proximal fragment is from a type common in East Texas and Louisiana (Turner and Hester 1985) but very uncommon in Central Texas. The extrapolated dimensions fit the width and stem length for the type (Suhm and Jelks 1962) but the estimated total length is 25% longer than the average. The main diagnostic attribute is the contracting stem with a convex base or simply a U-contour stem. It is made of light tan chert. Flaking is random. Heavy patina on the obverse body face only.

Measurements: Omitted as being too conjectural.

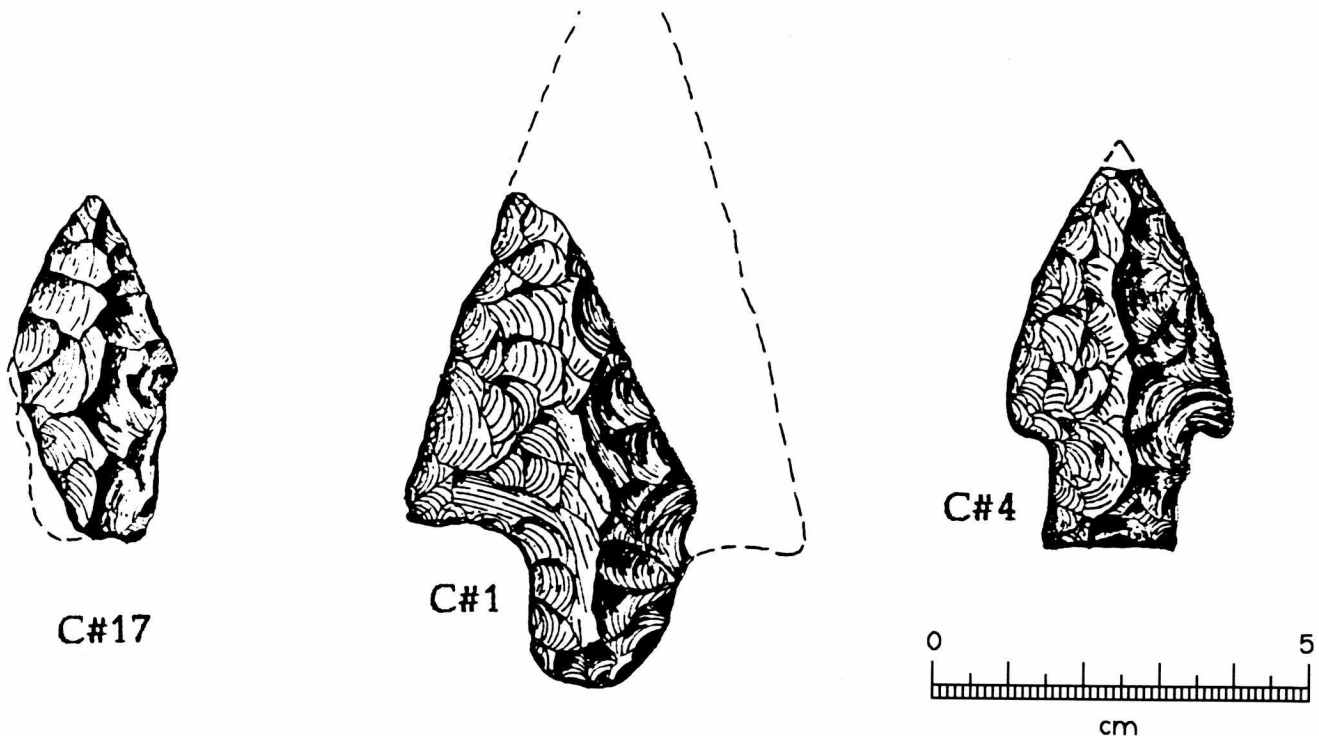
Suggested age span: 3,250 years with the mean being ca. 875 B.C.

**BULVERDE: Catalog # 4**

Remarks: This Central Texas point is essentially complete and is made of mottled black and light tan chert. Flaking is random. It has little, if any, patina on either body face.

Measurements: L(est)=54 mm, BW=29.2 mm, T=7.0 mm, SW=17.8 mm, and Wt=9.7 gms.

Suggested age span: 500 years with the mean being ca. 2750 B.C.



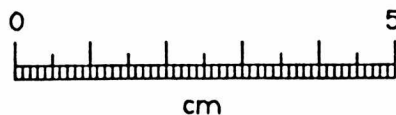
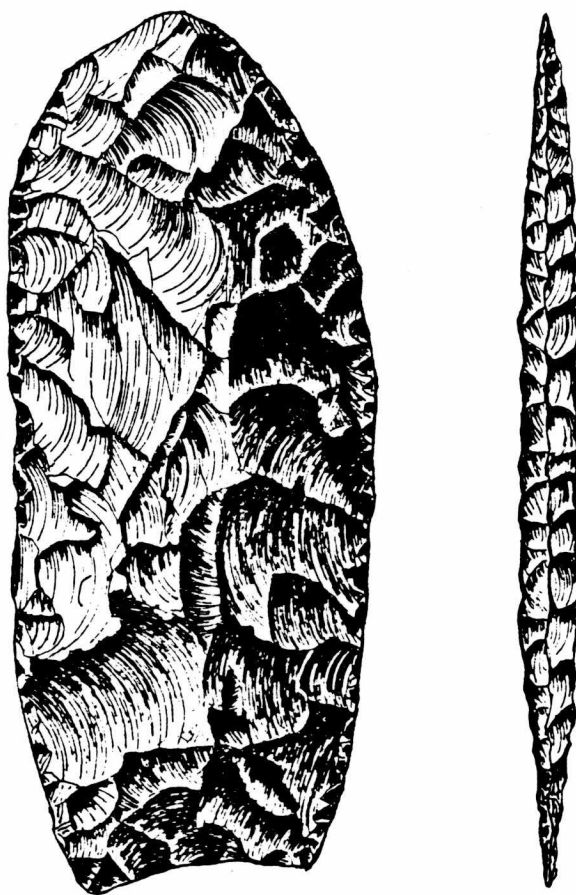
**EARLY KNIFE or FLESHING TOOL: Catalog # 26**

This unusual artifact is certainly an example of the ultimate in craftsmanship. It is a biface that is 11.5 cm long by 4.7 cm wide but only 0.74 cm maximum thickness. It is made of mottled beige and light beige chert. Flaking is random.

While one hesitates to say that it is of Paleo-Indian age, one will not hesitate to say that it appears to be pre-Early Archaic or early Early Archaic. Several factors contribute to this conclusion: Very heavy patina on one body face, it has a concave base which is a characteristic exhibited by many pre-Archaic artifacts, the quality of the workmanship, the lower lateral edges may be ground, it came from the same unit and level as the proposed Texas Angostura (Cat. #5) and was in the adjacent unit to the blade cores (Figure 3).

Well, now that the artifact has been elevated to prominence by its bootstraps, so to speak, what happens if Collins and Headrick (1992) change their minds about the age of blade cores? Do we join each other in the life boats?

Of personal interest to the author is the presence of a nearly perfect duplicate copy of this artifact on display in the collection of Mr. Harold Courson in Perryton, Texas.



## MISCELLANEOUS ARTIFACTS - No discussion.

- 13 Large distal point fragments
- 5 Small distal point fragments
- 2 Large proximal point fragments
- 2 Small proximal point fragments
- 2 Mid-section point fragments
- 2 Proximal knife fragments
- 2 Distal half of trade blanks
- 5 Beveled edge scrapers
- 9 Large biface proximal fragments, 1/4 to 1/2 original size
- 1 Large tear-drop shaped bifacial chopper, 14 x 11 x 2.5 cm
- 1 Large oblong shaped bifacial chopper, 13 x 9 x 4 cm
- 1 Early knife preform
- 12 Small unclassified biface fragments
- Bone fragments from the 30-40 cm level of Unit D-2 (N21, E3)  
 Comment: Hopefully, perhaps with Texas Lotto winnings, the age of these fragments can be determined some day since they were in the same Unit as the blade cores and the Texas Angostura.

## DISCUSSION

In all, the variety of types found so far is truly amazing. The site seems to have been intermittently, but almost continuously, occupied over a very, very long time span. When nearly 50% of the types known to occur in Central Texas show up in one spot, Early Man must have considered the Fox Draw area most desirable.

This makes one wonder what caused the intermittent displacement of the aboriginal groups and why they stopped coming to the area. Was it seasonal migration, tribal wars, disease, or some superstition? Whatever the cause, they obviously moved on from time to time. Why they quit com-

ing ca. A.D. 1000 is most intriguing. This apparent change in desirability is indicated by the following: although the area abounds with projectile points of dart point size, very few points which could be called arrowheads are found. This is true not only at 41GL175 but at many of the other sites in the area which have been surface collected.

## ACKNOWLEDGEMENTS

The author would like to thank the James Baethge family for allowing me to dig into Indian prehistory on their ranch.

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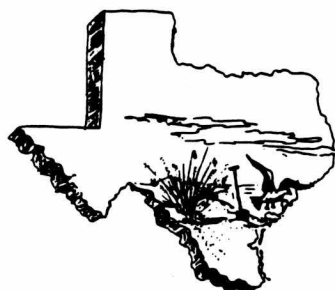
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## COASTAL BEND ARCHEOLOGICAL SOCIETY

Another local archaeological society our readers may find interesting to participate in is the Coastal Bend Archeological Society, recently risen from a short functioning hiatus, and now a very active group.

A recent business meeting vote has returned their monthly meeting to the first Wednesday of each month. The meetings will be in the Hilltop Community Center, Corpus Christi, at 7:00 o'clock p.m.

Contact Larry Beaman, 303 Rolling Acres Dr., Corpus Christi, Texas 78410 for further information.



## AUTHORS

- BYRON D. BARBER is president of Applied Assets, Inc., a San Antonio based commercial real estate firm. His interest in Indian artifacts began as a young boy in Van Zandt County, Texas, with his father, Byron L. Barber (whose name is given to the "Barber Point"). Byron's particular interest has been surface sites in south Texas and he has recorded some sites with the Texas Archeological Research Laboratory (TARL). His collection was loaned to TARL for documentation of the recorded sites. He is a member of the Southern Texas Archaeological Association and Friends of TARL.
- C. K. CHANDLER 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 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.
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- DON KUMPE is a lifelong native of the Lower Rio Grande Valley. He and his wife, Mary, own and operate a jewelry store on South Padre Island. The store's specialty is jewelry that is designed and finished "while-u-wait." Don is a member of STAA. As a teenager he began collecting artifacts while on camping trips in Starr County. This led to his 30 years of continuous interest in the archaeology of the Lower Rio Grande River.
- RICHARD MCREYNOLDS, *La Tierra's* illustrator, began his interest in Indian artifacts at an early age. His great-grandfather was an artifact collector in Massachusetts (some previous biographical notes were in error). His family moved from Massachusetts to a farm in Arkansas, where he was born. His interest began when following his mother across the fields hunting artifacts. When he was five they moved to south Texas. Richard has done archaeological work in the Pecos River area and south Texas in general. He has been in Belize in 1990, '91 and '93 for the purpose of illustrating the artifacts. However, he still favors the Lower Pecos area to fulfill his interests. Richard is a Civil Service employee at Kelly Air Force Base. He, his wife Carolyn, and their two grown daughters reside in San Antonio.
- R. K. (PETE) SAUNDERS retired from Exxon Research and Engineering in 1977 so that he and his wife, Dorothy, could become full-time "trailerites." While spending the winter of 1979-1980 at Los Lobos Trailer Park on Falcon Lake he began to find lithic artifacts and became an avid avocational archaeologist. He is a member of STAA and the Texas Archeological Society (TAS) and has participated in the Dan Baker site excavations, as well as STAA and TAS field schools, and the UTSA-CAR/Witte Museum Baker Cave (Val Verde County) excavations in 1984. He has a home near Canyon Lake and has discovered various ways to replicate projectile point forms.
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- ELLEN SUE TURNER is the author, with Thomas R. Hester, of *A Field Guide to Stone Artifacts of Texas Indians* (first and second editions) has served as editor and author of a number of publications. Turner was elected 1993-1994 president of the Texas Archeological Society.

## **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.

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