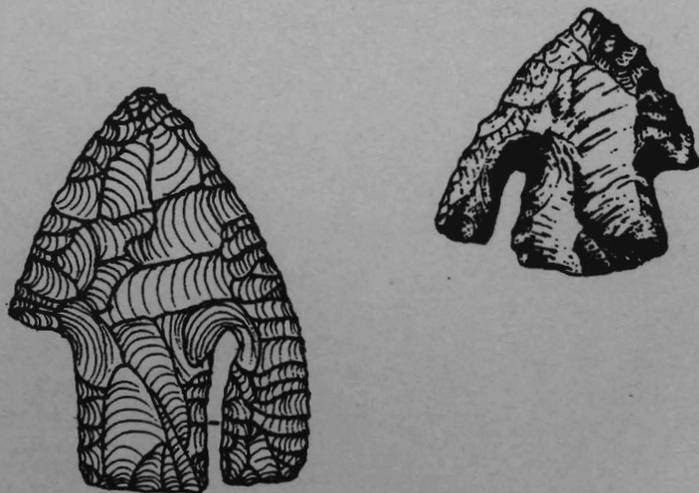


**JOURNAL OF THE
SOUTHERN TEXAS
ARCHAEOLOGICAL
ASSOCIATION**



**LA
TIERRA**

Volume 10
Number 3
1983

LA TIERRA

Quarterly Journal of the Southern Texas Archaeological Association

Volume 10, Number 3
July, 1983

Jimmy L. Mitchell
Editor

ANDICE: AN EARLY ARCHAIC DART POINT TYPE (Elton R. Prewitt)	1
NOTES ON SOME BELL POINTS FROM SAN PATRICIO COUNTY, TEXAS (C. K. Chandler)	7
LATE PREHISTORIC PROJECTILE POINTS FROM THE VICINITY OF THE DAN BAKER SITE, 41 CM 104, COMAL COUNTY, TEXAS (Jimmy L. Mitchell & Shirley Van der Veer)	11
THE BROM COOPER PALEO-INDIAN COLLECTION FROM MCMULLEN COUNTY, TEXAS (Thomas C. Kelly)	17
PROBLEMS IN TYPOLOGY: THE CASE OF THE "MEDINA" POINTS (Thomas R. Hester)	41
COMMITTEES AND POINT TYPE CLASSIFICATION: A REPLY TO HESTER (William B. Carroll)	43
EDITORIAL COMMENT: HESTER VERSUS CARROLL	44
CUT MUSSEL VALVE FROM 41 MC 320, THE NICHOLS I SITE, MCMULLEN COUNTY, TEXAS (Curtis Dusek)	45
CALL FOR NOMINATIONS FOR THE 1983 ROBERT F. HEIZER AWARD	47
AUTHORS	48

Cover Illustration: *Andice* (left), and *Bell* points. See articles by Elton R. Prewitt and C. K. Chandler, this issue.

Manuscripts for the journal should be sent to: Editor, *La Tierra*, Jim Mitchell, 926 Toepperwein Road, Converse, Texas 78109. Copies of past issues of the journal are available from the Editor, also. To order Special Publication No. 2 (The Handbook), order from the Office, STAA, 123 East Crestline, San Antonio, Texas 78201.

For membership information, contact the Membership Chairman: Liz Smith, 1607 West Huisache, San Antonio, Texas 78201.

For use of the STAA Lending Library, contact Lynn Highley, Anne Fox or Shirley Van der Veer at the Archaeology Laboratory, The University of Texas at San Antonio, 78285.

Library of Congress Catalog No. 76-649774.

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

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

ANDICE: AN EARLY ARCHAIC DART POINT TYPE

Elton R. Prewitt

ABSTRACT

Basic documentation for the *Andice* point, an Early Archaic dart point of central and southern Texas. Closely related to *Bell* dart points but distinguishable by greater size, stem length, and barb length. Both types may be related to the *Calf Creek* type of eastern Oklahoma and western Arkansas.

INTRODUCTION

During the summer of 1983, C. K. Chandler of San Antonio asked me to review a manuscript he had prepared on the subject of *Bell* dart points in San Patricio County, Texas (see Chandler's report, elsewhere in this issue). I casually mentioned that one of the specimens included in his discussion appeared to be an *Andice* rather than a *Bell* point. His reaction was one of consternation, and it focused my attention on a recurrent problem in the archaeological literature. Both professional and avocational archaeologists tend to recognize and develop information on projectile point styles, then bury the data in an obscure journal, a technical report with very limited distribution, or a manuscript that only a dozen or so people ever see. I know. I am as guilty as anyone else, and the *Andice* type is a case in point.

Many projectile point styles have been named, but few people are aware of those that are not included in the venerable editions of the *Handbook of Texas Archeology* (Suhm, Krieger and Jelks 1954; Suhm and Jelks 1962). Who has ever heard of a *Dawson* point (Duffield 1963:17-18; Prewitt 1974:58-62)? The list is extensive. A few examples are: *Eliasville* (Flinn and Flinn 1968:98-100), *Mintner* (Johnson 1962:250), *Artell* (Bryan 1936:92; Prewitt 1974:56-57), *Hoxie* (Prewitt n.d., 1981, 1982), *La Jita* (Hester 1971:74-76), *Neches River* (Kent 1961; Jelks 1965:140-141; Prewitt 1974:66-67), *Godley* (Jelks, 1962:40), *Conejo* (Johnson 1964:32-33).

In order to alleviate this situation, I have been working for the past seven years on a computerized system of projectile point morphology for Texas with a view toward producing a replacement for the outdated *Handbook*. This is not an easy task, and it is one which takes a considerable amount of time when work on the project is sandwiched between tightly scheduled contract projects. The end result will be worth the time and effort. However, what can be done in the meantime?

Brief type descriptions in regional journals such as *La Tierra* is one way to distribute basic information on new (or not-so-new in many cases) proposed types. While I cannot promise to publish descriptions of all obscure types that have been proposed, as time permits I will attempt to correct the situation by providing descriptions of at least some of the major types that are not readily available in the existing literature. The first of these is included in this article, and hopefully will help in clarifying some of the early Archaic types that appear frequently albeit in limited numbers. Comments, suggestion, criticisms, and distributional data are welcomed.

Origin of Type Name

New type proposed on the basis of materials excavated by J. E. Pearce from the Gault Farm Site (41 WM 9) in 1929 near the Community of Jarrell. Named for the small community of Andice a few miles west of the Gault Farm Site.

Description

Usually the blade is broad and subtriangular with convex lateral edges. Hallmarks of the type are long rectangular stems and prominent massive barbs that extend

downward to near the base. Careful flaking reminiscent of the Paleoindian lithic tradition is frequently evident (Figure 1). The blades appear to have been re-sharpened frequently, and they may be short in relation to stem length (Figure 1, c-e). The long barbs appear to be formed by basal notching of large thin subtriangular preforms. The barbs are narrowest at the juncture with the blade; this relatively weak juncture results in a high breakage frequency, and most specimens lack one or both barbs. Blade resharpening may remove readily recognized evidence of barb breakage (Figure 1,c). The stems are usually bifacially thinned by the removal from each face of two or more flakes that extend upward from the base to near the juncture of the stem and the blade. The edges of the stem are carefully and steeply chipped in the process of basal notching. The stems are essentially rectangular, but may vary from slightly contracting to slightly expanding. In axial cross section, the stems are wedge-shaped; in lateral cross section, they are normally slightly biconcave. Edge grinding of stems and bases is rarely evident. Broken stems can easily be misidentified as fragments of non-edge-smoothed untyped Paleoindian Stage points. The bases are usually straight, but may vary from slightly concave (24%) to slightly convex (26%).

Dimensions

These are large points and the long stem only averages one-third of the total length, while the blade width is usually over half the total length. The ranges and means of seven critical measurements are tabulated as follows (taken from a sample of 50 specimens):

	<u>Length</u>	<u>Width</u>	<u>Thickness</u>	<u>Haft Length</u>	<u>Neck Width</u>	<u>Base Width</u>	<u>Base Depth</u> *
Maximum:	106	52	10	32	23	21	-4
Minimum:	42	27	6	16	13	15	+2
Mean:	69.9	43.8	7.6	22.7	17.9	18	0

* + = concave, - = convex, and 0 = straight; all measurements are in millimeters

Cultural Affiliations

Andice points occur in the early Archaic Jarrell Phase of the Central Texas archaeological region. They are closely related to the *Bell* type and generally covary with the distribution of that type. *Andice* is distinguished from *Bell* on the basis of overall size, stem length, and barb length. *Bell* stems usually expand more markedly and rarely exceed 16 mm in length. The two types intergrade, and the separation between them becomes arbitrary. The *Calf Creek* type of western Arkansas, southwestern Missouri, and eastern Oklahoma morphologically is mid-range between *Andice* and *Bell* points. All are early Archaic in affiliation, and the three types form a distinct morphological series in the sense proposed by Jelks (1978:75). *Andice* points are frequently misidentified as *Bulverde* (for example, see Suhm, Krieger and Jelks 1954:405, Plate 81r), or "early" *Bulverde* (e.g., Fox and Hester 1976:62, Figure 17a, f-h, j and k). This arises from the frequent lack of the barbs and the wedge-shaped stem that is also characteristic of *Bulverde* points. *Andice* points are somewhat similar to *Carrollton* points, but are larger and usually lack the edge grinding of the latter.

Distribution

Most common along and either side of the Balcones Escarpment in eastern Central Texas, then extending across the Gulf Coastal Plain to the Victoria-Corpus Christi area along the Texas coast.

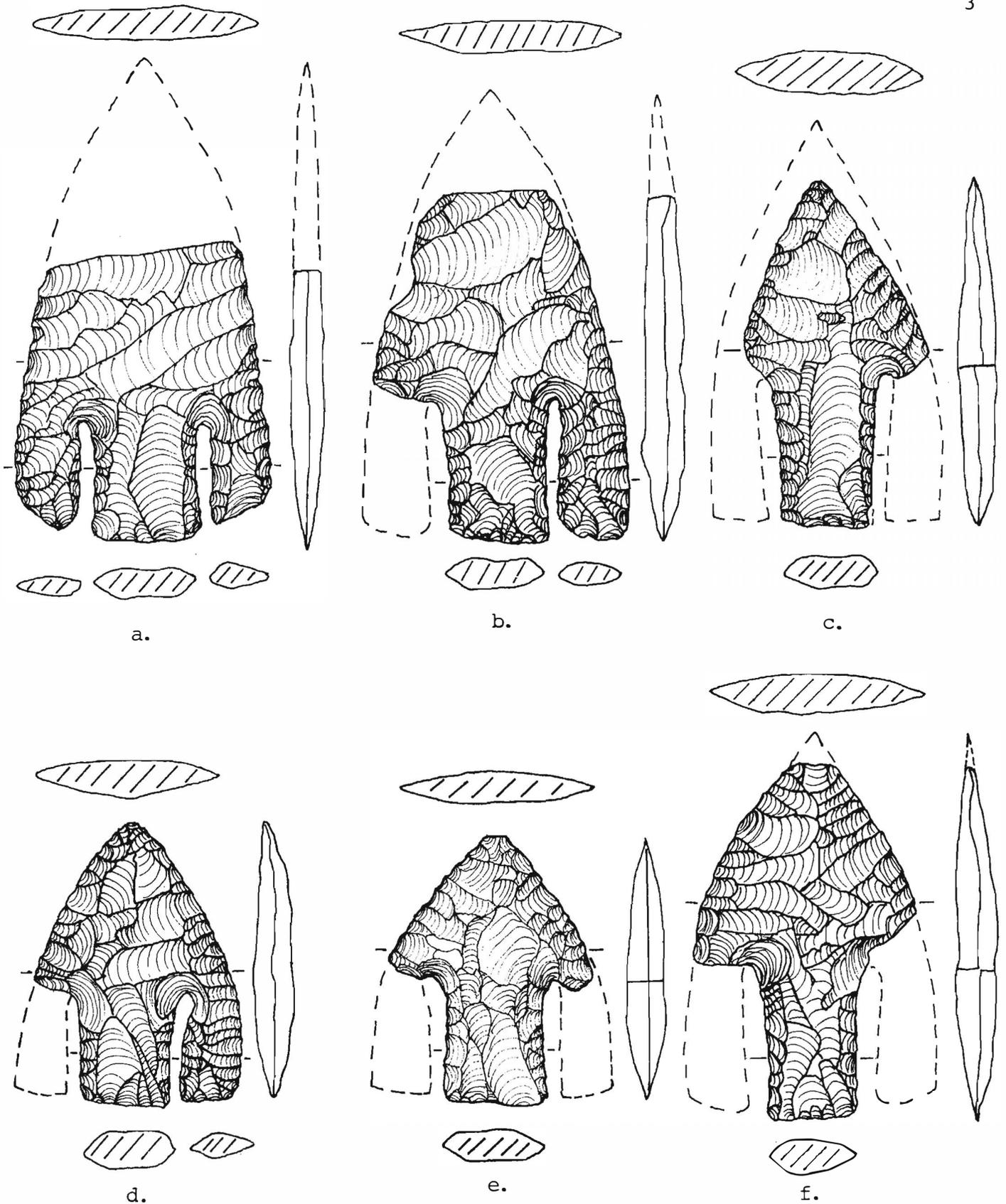


Figure 1. *Andice* dart points (shown actual size). Specimens reconstructed to show approximate original form (dashed lines). Provenience: a-e, Gault Farm (41WM9), Williamson County, Texas; f, Bear Creek Mound (41TV103), Travis County, Texas.

Estimated Age

6000 to 5000 B.P. (4050 to 3050 B.C.)

References

Suhm, Krieger and Jelks 1954:405, Plate 81, r. Fox and Hester 1976:62, Figure 17, a-c, f-h, j and k. Luke 1980:45, Figure 27, a. Fox, *et al.*, 1974:49, Figure 19, a; 172, Figure 70, e. Hays (ed.) 1982:12-14, Figure 14.1-2a. Raab (ed.) 1981:817, Figure 4, h. Wesolowsky, *et al.* 1976:46, Figure 11, c, d; 48, Figure 12, b. Sorrow 1969:15, Figure 12, c. Prewitt 1981:76, Figure 4; 78. Suhm 1955:25, Figure 4, T.

References

Bryan, Frank

1936 Preliminary Report on the Archeology of Western Limestone County. *Bulletin of the Central Texas Archeological Society* 2:81-95.

Duffield, Lathel F.

1963 The Strawn Creek Site: A Mixed Archaic and Neo-American Site at Navarro Mills Reservoir, Navarro County, Texas. Report submitted to the National Park Service by the Texas Archeological Salvage Project, The University of Texas.

Flinn, Richard, and Judy Flinn

1968 The High Bluff Site on the Clear Fork of the Brazos River. *Bulletin of the Texas Archeological Society* 38:93-125.

Fox, Anne A., and Thomas R. Hester

1976 An Archaeological Survey of Coletto Creek, Victoria and Goliad Counties, Texas. *Center for Archaeological Research, The University of Texas at San Antonio, Survey Report* 18.

Fox, Daniel E., Robert J. Mallouf, Nancy O'Malley, and William M. Sorrow

1974 Archeological Resources of the Proposed Cuero I Reservoir, DeWitt and Gonzales Counties, Texas. *Texas Historical Commission and Texas Water Development Board, Archeological Survey Report* 12.

Hays, Thomas R. (Editor)

1982 Archeological Investigations at the San Gabriel Reservoir Districts, Central Texas. Report submitted to the U. S. Army Corps of Engineers, Fort Worth District, by the Archaeology Program, Institute of Applied Sciences, North Texas State University (4 volumes).

Hester, Thomas R.

1971 Archeological Investigations at the La Jita Site, Uvalde County, Texas. *Bulletin of the Texas Archeological Society* 42:51-148.

Jelks, Edward B.

1962 The Kyle Site: A Stratified Central Texas Aspect Site in Hill County, Texas. *The University of Texas, Dept. of Anthropology, Archaeology Series* 5.

1965 The Archeology of McGee Bend Reservoir, Texas. Unpublished Ph.D. dissertation, Department of Anthropology, The University of Texas.

1978 Diablo Range. In: *Chronologies in New World Archaeology* (R. E. Taylor and Clement W. Meighan, Editors):71-111. Academic Press, New York.

Johnson, LeRoy, Jr.

- 1962 The Yarbrough and Miller Sites of Northeastern Texas, With a Preliminary Definition of the La Harpe Aspect. *Bulletin of the Texas Archeological Society* 31:141-284.
- 1964 The Devil's Mouth Site: A Stratified Campsite at Amistad Reservoir, Val Verde County, Texas. *The University of Texas, Department of Anthropology, Archaeology Series* 6.

Kent, D. T., Jr.

- 1961 Letter to Lathel F. Duffield containing ms. description of *Neches River* dart points. McGee Bend Reservoir files, Texas Archeological Research Laboratory, The University of Texas at Austin.

Luke, Clive J.

- 1980 Continuing Archaeology of State Highway 16 in Kerr County, Texas: the Excavations of the Shep Site (41 KR 109) and the Wounded Eye Site (41 KR 107). *Texas State Department of Highways and Public Transportation, Publications in Archaeology* 16.

Prewitt, Elton R.

- 1974 Upper Navasota Reservoir: An Archeological Assessment. *The University of Texas at Austin Archeological Survey Research Report* 47.
- 1981 Cultural Chronology in Central Texas. *Bulletin of the Texas Archeological Society* 52:65-89.
- 1982 Archeological Investigations at the Loeve-Fox, Loeve and Tombstone Bluff Sites in the Granger Lake District of Central Texas. In: *Archeological Investigations at the San Gabriel Reservoir Districts, Central Texas*. T. R. Hays (Editor). Report submitted to the U. S. Army Corps of Engineers, Fort Worth District, by the Archaeology Program, Institute of Applied Sciences, North Texas State University (4 volumes), 4:1-307.
- n.d. The Rogers Spring Site: 1974 Investigations. The University of Texas at Austin, Texas Archeological Survey Research Report 54 (unpublished manuscript).

Raab, L. Mark (Editor)

- 1981 Settlement of the Prairie Margin: Archaeology of the Richland Creek Reservoir, Navarro and Freestone Counties, Texas, 1980-1981. Archaeology Research Program, Department of Anthropology, Southern Methodist University.

Sorrow, William M.

- 1969 Archeological Investigations at the John Ischy Site: A Burnt Rock Midden in Williamson County, Texas. *The University of Texas at Austin, Texas Archeological Salvage Project Papers* 18.

Suhm, Dee Ann

- 1955 Excavations at the Collins Site, Travis County, Texas. *Bulletin of the Texas Archeological Society* 26:7-54.

Suhm, Dee Ann, Alex D. Krieger, and Edward B. Jelks

- 1954 An Introductory Handbook of Texas Archeology. *Bulletin of the Texas Archeological Society* 25.

Suhm, Dee Ann and Edward B. Jelks

1962 Handbook of Texas Archeology: Type Descriptions. *Texas Archeological Society Special Publication 1* and *Texas Memorial Museum Bulletin 4*.

Wesolowsky, Al B., Thomas R. Hester and Douglas R. Brown

1976 Archeological Investigations at the Jetta Court Site (41 TV 151), Travis County, Texas. *Bulletin of the Texas Archeological Society* 47:25-87.

Request for Information

Your assistance is requested in completing documentation of *Andice* projectile points to insure their distribution and range of measurements is fully known.

If you have any *Andice* points, please report them to:

Elton R. Prewitt
Prewitt and Associates
7530 N. Lamar
Austin, Texas 78752

Please include an outline sketch, measurements, and site location; photos are desirable.

NOTES ON SOME *BELL* POINTS FROM SAN PATRICIO COUNTY, TEXAS

C. K. Chandler

ABSTRACT

Ten *Bell* and *Bell*-like points are illustrated and discussed. These are surface finds from San Patricio County sites in the Texas Coastal Bend area.

INTRODUCTION

Projectile points with long barbs formed by basal notches with wide, thin triangular blades and rectangular to slightly expanding stems were recovered from sites in San Patricio County (see Figure 1). Such points were first reported by Johnson (1964) from Early Archaic contexts in Val Verde County, and at that time were called "Early Barbed" points.

This style point was first called "Bell" by Sorrow, Shafer and Ross (1967) at Stillhouse Hollow in Central Texas. *Bell* points have been reported from other Central Texas sites and their context well established as the transitional period between Late Paleo-Indian and Early Archaic at approximately 6000 B.C. to 3500 B.C. (Sollberger and Hester 1972:339). Jelks (1978) places *Bell* points in his Stillhouse series of Early Archaic points and states "Geographic Distribution: A common Early Archaic form in Central Texas and in the eastern part of the Trans-Pecos; not reported from other areas, but could be present elsewhere, especially in the Coahuila-Chihuahua and central Gulf Coast area." *Bell* points have generally been considered a Central Texas type; however, Parker and Mitchell (1979) report several *Bell* or *Bell*-like points from Crosby County and suggest *Bell* points may be a minor Pre-Archaic series (or family) which has a much wider distribution.

Prewitt has classified some long-stemmed *Bell*-like points as *Andice*. The overall appearance and the technology for producing the *Bell* and the *Andice* are the same but the *Andice* generally has a straight stem and a straight base with the stem being noticeably longer than the *Bell*. The technology for the *Calif Creek* points appears to be the same as for the *Bell* and the *Andice* but the dimensions for the *Calif Creek* fall between the *Bell* and the *Andice* (Elton Prewitt, personal communication).

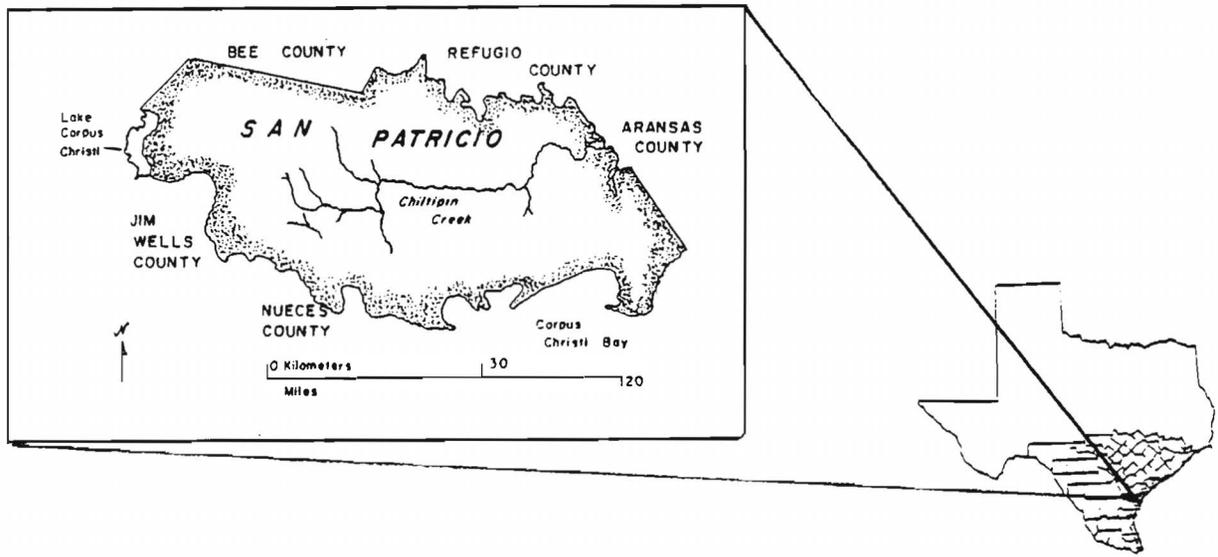


Figure 1. Map of San Patricio County, with its location in Southern Texas.

THE ARTIFACTS

The artifacts illustrated here (Figure 2) were recovered from four surface sites in San Patricio County in southern Texas by C. K. Chandler and D. R. Espy. All of these sites are in the western part of the county along Chiltipin Creek. One of the sites (41 SP 69) has also produced a number of Late Paleo points that have been previously reported in *La Tierra* (Chandler 1982).

The broken areas of the points illustrated here have been reconstructed for measurement purposes, and with this reconstruction, dimensional range in millimeters for all ten is:

	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>
Length	35	67	47
Blade Width	37	45	40
Thickness	5	7	6
Stem Length	11	23	15
Stem Width	16	24	20
Neck Width	14	21	17
Basal Convexity	0	3	2

Dimensions for those classified as *Bell* are:

	<u>Minimum</u>	<u>Maximum</u>	<u>Average</u>
Length	35	52	42
Blade Width	37	45	39
Thickness	5	7	6
Stem Length	11	15	13
Stem Width	16	24	20
Neck Width	14	21	16
Basal Convexity	2	3	2.4

These *Bell* points fit well within the range established by Sorrow, Shafer and Ross (1967). Those classified as other than *Bell* have noticeably longer stems with greater overall length and are slightly thicker. While all of these appear to fall within the *Bell* series, there are dimensional and some minor technological differences that may set them apart. One noticeable difference is the greater length of basal thinning flakes on the *Andice* points. These flakes usually run the full length of the stem and sometimes extend on to the blade. This is the major reason for the classification of Specimen I in Figure 2 as *Andice*.

CONCLUSIONS

The occurrence of *Bell* points in the Coastal Bend area of Texas expands the distributional area of these points and supports Parker and Mitchell's (1979) suggestion that the *Bell* type is not restricted to Central Texas.

References

- Jelks, Edward B.
 1978 Diablo Range. In: *Chronologies in New World Archaeology* (R. E. Taylor and Clement W. Meighan, Editors). Academic Press, New York.

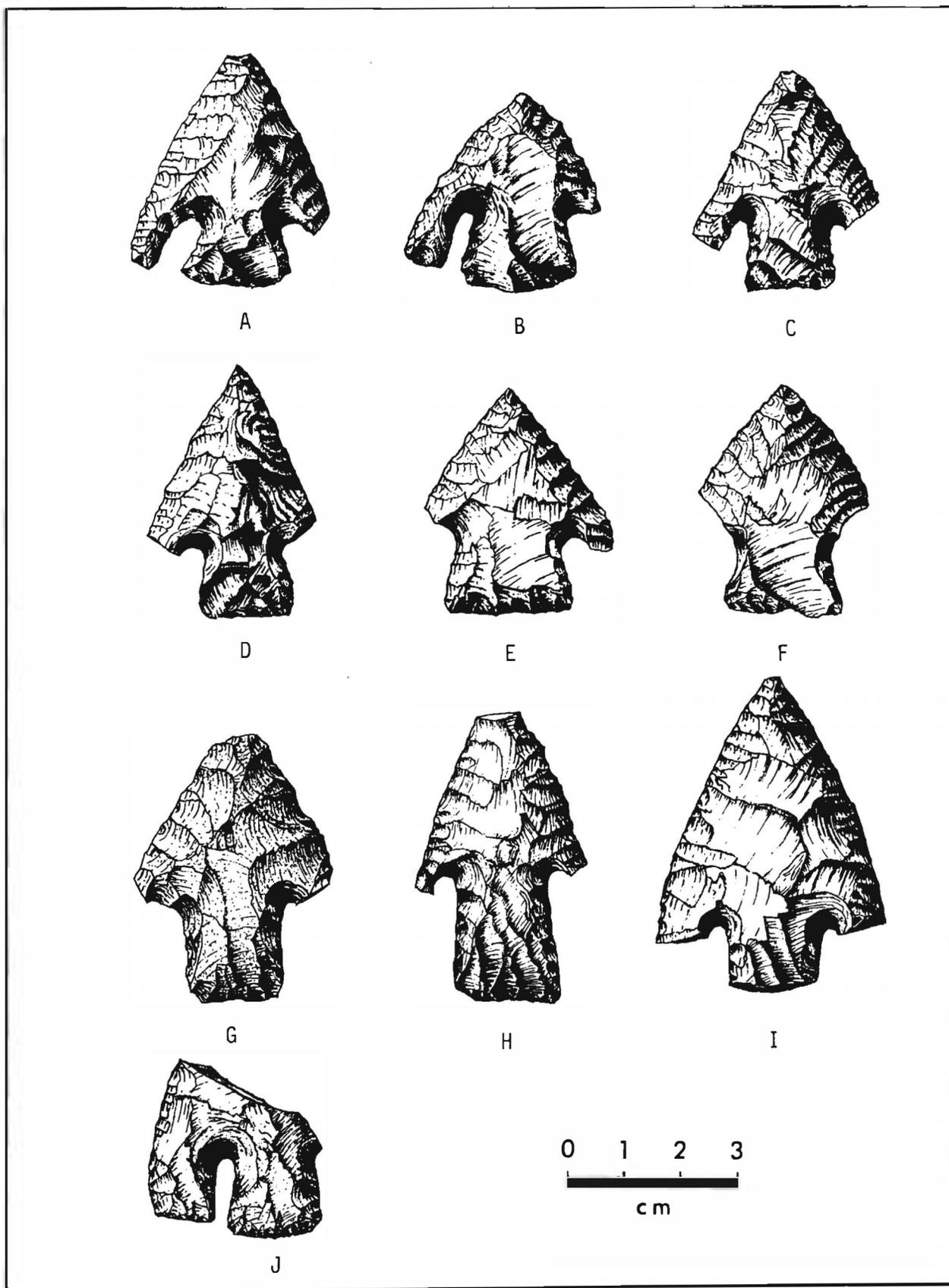


Figure 2. Artifacts from San Patricio County, southern Texas. A,B,C,D,E,F,J: *Bell* dart points; H,I: *Andice* dart points; G: possible *Calf Creek*. Specimens A,B,C,F from 41 SP 69; G,I from 41 SP 68; D,E,H from 41 SP 76; J from Espy's T254-12. (Illustrations by Richard McReynolds)

Johnson, L., Jr.
 1964 The Devil's Mouth Site: A Stratified Campsite at Amistad Reservoir, Val Verde County, Texas. *University of Texas at Austin, Department of Anthropology, Archaeology Series, Number 6.*

Parker, Wayne and Jim L. Mitchell
 1979 Notes on Some *Bell* Points from a Site in Crosby County, Texas. *La Tierra* 6(2).

Sollberger, J. B., and T. R. Hester
 1972 The Strohacker Site: A Review of Pre-Archaic Manifestations in Texas. *Plains Anthropologist* 17(58).

Sorrow, W. M., H. J. Shafer and R. E. Ross
 1967 Excavations at Stillhouse Hollow Reservoir. *Papers of the Texas Archeological Salvage Project, No. 11.*

* * * * *

CORRECTION TO VOLUME 10, NUMBER 2, APRIL 1983

Please note the following corrections in the article "Espinosa, Olivares and the Colorado River Indians, 1709" by T. N. Campbell.

- p. 6, paragraph 3, line 8 - Rio Sabinas, not Sabina
- p. 6, paragraph 4, line 2 - Salinas, not Salina
- p. 8, paragraph 1, line 13 - Yojuane, not Youjuane
- p. 9, paragraph 1, line 5 - Yojuane, not Youjuane

A considerable amount of Archaic materials have been recovered. Most of the artifacts recovered have been Archaic projectile points; Figure 2 illustrates a few of the point types which were recovered from the top cultural levels of one test pit (N109E100), excavated primarily by W. R. (Van) Van der Veer. This particular one by two meter test pit has now been excavated to bedrock at a depth of 3.7 meters; cultural material was recovered from most levels but became rare in the reddish gravel and clay layer of the bottom half-meter. One projectile point, tentatively identified as a *Plainview* point was recovered in the lowest level of the pit, ca. 2 cm above the limestone bedrock.

One of the interesting findings (or rather lack of finding) at the Dan Baker site has been the absence of Late Prehistoric artifacts in the upper levels. The site is an extensive burned rock midden with a culturally sterile overburden averaging about 80 cm in the main trench. Each new test pit was very carefully screened in an attempt to locate such Late Prehistoric materials, since some Archaic burned rock middens in this region are overlain with Late Prehistoric arrow points (Beadles 1971; Hester 1971; Beasley 1978; Graves and Highley 1978; Mitchell 1978; Skinner 1979a-c; Weir and Doran 1980).

The lack of Late Prehistoric artifacts in or on the Dan Baker burned rock midden, and the 80 cm of alluvial deposit covering the midden suggest that the site was subject to considerable flooding during the Late Prehistoric era (A.D. 850+). The site is located on a wide terrace half way up a slope; the present surface of the site is approximately 7 to 8 meters above an intermittent creek which drains north into the Guadalupe River. The top of the slope is a flat, limestone plateau covered with cedar and scrub oak trees. Given our hypothesis of frequent Late Prehistoric flooding of the site, the logical location for more recent artifacts would be on top of the slope, which is approximately 8 meters higher than the Dan Baker Site (see cross section sketch, Figure 3).

LATE PREHISTORIC MATERIALS

A thorough search over the area at the top of the slope directly above the site revealed flint debitage (chips, fragments) and some scattered reddish limestone fragments, which suggests the area was used. Contact was made with the owners of the property adjacent to the Dan Baker site, Joe and Nancy Holmstrom of Houston, Texas, who have recently built a home on their property. They reported that some artifacts were recovered by workmen who dug water and powerline trenches to service their new home. The Holmstroms kindly loaned their artifacts to STAA for analysis and documentation; their collection of projectile points is illustrated in Figure 4.

Several of the specimens from this site appear to be *Edwards* arrow points (Figure 4, a-c,f), although the broken bases make classification tenuous (4,b may be a *Scallorn*). One specimen (Figure 4,d) is probably a *Cliffton* arrow point (which some

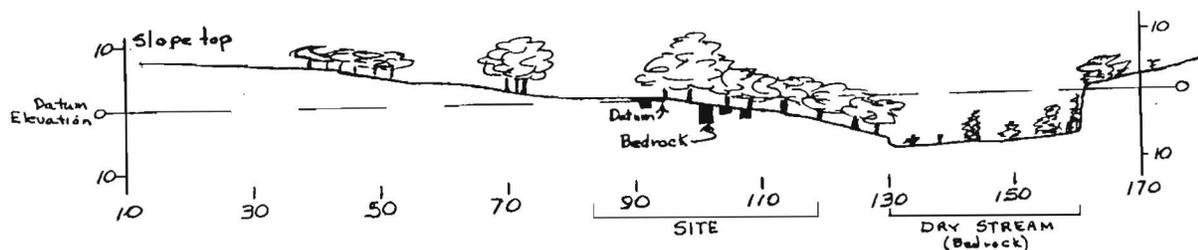


Figure 3. East-West cross section sketch of 41 CM 104 (Dan Baker Site). Bedrock pit is at N109E100. (Sketch courtesy of W. R. Van der Veer—figures are in meters.)

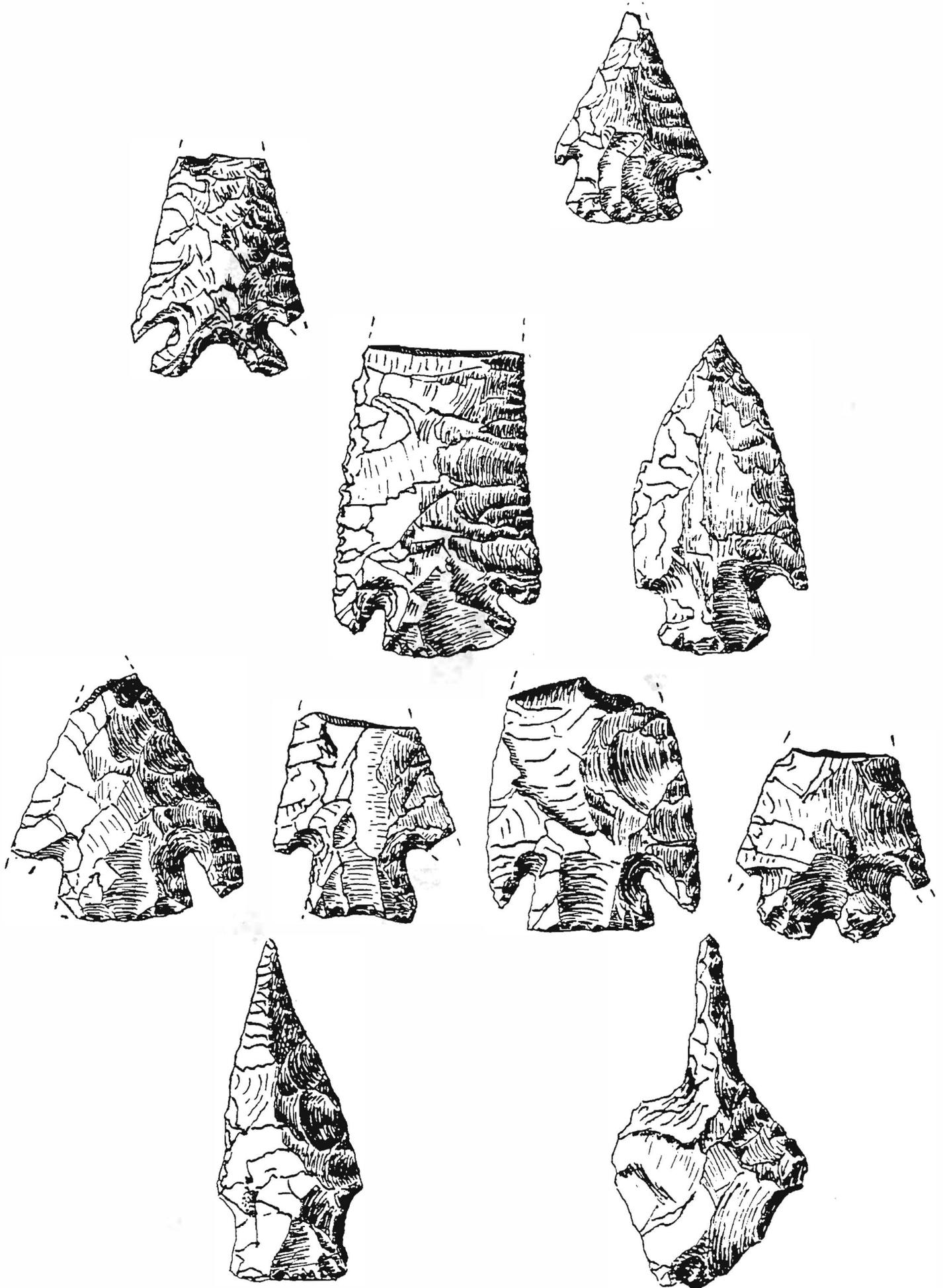


Figure 2. Archaic artifacts recovered from N109E100 in Early Excavations at 41 CM 104. (Illustration to scale by Richard McReynolds.)

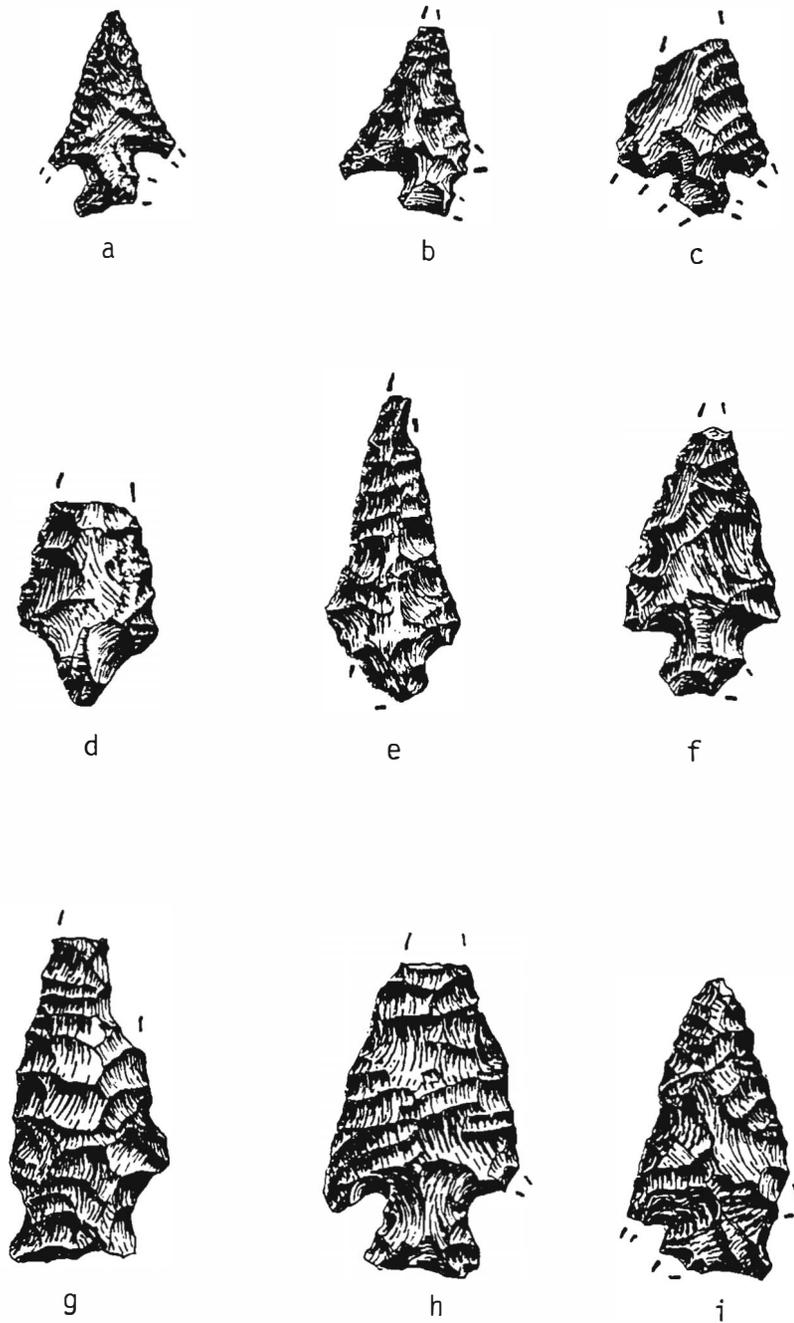


Figure 4. Late Prehistoric and Transitional Projectile Points Recovered From the Vicinity of the Dan Baker Site, 41 CM 104. Collection of Joe and Nancy Holmstrom. (Illustration to scale by Richard McReynolds.)

authors consider to be an unfinished or poorly made *Perdiz* point; see Hester 1980:106). The fragmentary nature of the specimen shown as Figure 4,e makes it impossible to classify.

The remaining points are larger than most arrow points but smaller than most Archaic dart points; they may be Late Archaic points or may have functioned as early arrow points (see Sollberger 1967, 1978).

These artifacts clearly demonstrate the presence of Late Prehistoric people in the vicinity of the Dan Baker site, even though evidence is lacking in the midden area proper. A discussion with Mr. Paul Able, the contractor (and now an STAA member) whose workers found these points confirmed that all were found on the top of the slope above the Dan Baker site. All were surface finds; there is little soil covering the limestone layers making up the ridge.

The presence of *Edwards* arrow points is suggestive of the early part of the Late Prehistoric period (Mitchell 1978). The *Cliffton* or *Perdiz* arrow point reflects a somewhat later occupation of the area; similar points were recovered in other area sites; e.g., the Oblate Shelter (41 CM 1), levels 1 and 2 (Tunnell 1962).

CONCLUSIONS

The Late Prehistoric artifacts documented in this report demonstrate that even though such artifacts are missing at the Dan Baker site itself, they are to be found in the immediate vicinity of the site. Since such Late Prehistoric artifacts are found only on the top of the slope, the present evidence suggests that there may be some validity to our hypothesis of extensive flooding of the Dan Baker site during Late Prehistoric times, a hypothesis derived from the considerable overburden of alluvial soil on the burned rock midden. The so-called "hundred years' flood" of 1978 on the Guadalupe covered the site by some 1.5 to 2 meters, as indicated by debris found at the base of the first terrace (on which the site lies), and by mud in the trees in the site (observation by junior author).

At present, it is unclear whether such flooding is a very localized phenomenon, caused perhaps by a change in the course of the Guadalupe, or whether it may be a function of a climatic shift over a larger area. Some comparison of the amount of culturally sterile alluvial deposits covering Archaic burned rock middens on terrace sites along the Guadalupe might provide an answer for this issue.

ACKNOWLEDGEMENTS

Our thanks to Joe and Nancy Holmstrom for loaning their artifacts to STAA for analysis and documentation; to Paul Able for providing information on where the Holmstrom artifacts were found; and our very special thanks to Richard McReynolds for providing such excellent drawings of the Baker and Holmstrom points. We would also like to take this opportunity to thank the Dan Bakers on behalf of the entire STAA membership for their alertness in acquiring the site, for their continued hospitality in permitting STAA to excavate their site, and for hosting the STAA annual Barbeque both at the site and at their home. These actions and their continuing graciousness mark the Dan Bakers as very special people indeed!

References

- Beadles, Murray
1971 Interim Report Bammel Site (41 KR 10). *The Arti-Facts*, Hill Country Archeological Society 2(2):3-6.
- Beasley, Tom S.
1978 A Site with *Edwards* Points in Bandera County, Texas. *La Tierra* 5(4): 23-31.

- Graves, Carol, and Lynn Highley
1978 41 ME 7: A Cave Site in Medina County, Texas. *La Tierra* 5(2):10-19.
- Hester, Thomas R.
1971 Archeological Investigations at the La Jita Site, Uvalde County, Texas. *Bulletin of the Texas Archeological Society* 42:51-138.
1980 *Digging Into South Texas Prehistory*. Corona Publishing Company, San Antonio.
- Mitchell, Jimmy L.
1978 The Turtle Creek Phase: An Initial Late Prehistoric Component in Southern Texas. *La Tierra* 5(4):32-43.
- Skinner, S. Alan
1979a The Bushwhack Shelter (X41 KR 116), Kerr County, Texas. *La Tierra* 6(2):3-12.
1979b The Real Site (X41 KR 166), Kerr County, Texas. *La Tierra* 6(3):26-31.
1979c The Paris Site (X41 KR 1), Kerr County, Texas. *La Tierra* 6(4):3-15.
- Sollberger, J. R.
1967 A New Type of Arrow Point With Speculations As To Its Origin. *The Record*, Dallas Archeological Society 23(3).
1978 A Prehistoric Rockshelter in Kerr County, Texas. *La Tierra* 5(4).
- Tunnell, Curtis D.
1962 Oblate: A Rockshelter Site. In Johnson, Suhm, and Tunnell, Salvage Archeology of Canyon Reservoir: The Wunderlich, Footbridge, and Oblate Sites. *Texas Memorial Museum, Bulletin No. 5*.
- Weir, Frank A., and Glen H. Doran
1980 A Brief Report on the Anthon Site (41 UV 60). *La Tierra* 7(3):17-23.

THE BROM COOPER PALEO-INDIAN COLLECTION
FROM MCMULLEN COUNTY, TEXAS

Thomas C. Kelly

ABSTRACT

The Paleo-Indian projectile points of the Brom Cooper McMullen County collection include *Clovis*, *Folsom*, *Plainview*, *Golondrina*, *Angostura*, and *Scottsbluff* projectile points. Typological problems with the *Angostura* category lead to the redesignation as *Texas Angostura* points, and a subtype or variety of *Miniature Plainview* points is recognized. Two new types, "Victoria" and "Zella" points, are proposed and provisionally documented.

INTRODUCTION

Brom Cooper of Kingsville, Texas, made an extensive surface collection of prehistoric artifacts over a ten-year period from the Mule Creek pasture of the Jimmie Donnell Ranch in western McMullen County (Figure 1).

Hemion (1980a, 1980b) reported the groundstone artifacts and arrow points, Jones (1981) the modified sandstone artifacts, Woerner and Highley (1983) the Pre-Archaic and Archaic dart points, and this report is the rather belated analysis of the Paleo-Indian collection donated by Brom Cooper to the University of Texas at San Antonio in 1976. Site surveys assisted by him recorded the sites from which the collections were made and the finding of additional Paleo-Indian points authenticated the collection.

PREVIOUS ARCHAEOLOGY IN THE AREA

McMullen County and those portions of Atascosa and Frio Counties along San Miguel Creek, have a rich history of Paleo-Indian finds (Hester 1968; Mitchell 1974; Mokry 1976; McReynolds, *et al.* 1979, 1980; Dusek 1980; Beasley 1982). In contrast, the largest archaeological project ever in South Texas, the Nueces River Project

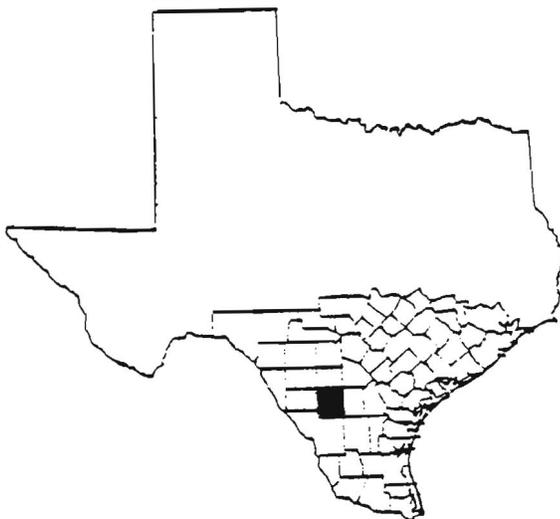


Figure 1. Texas map, showing McMullen County (darkened area).

(Grant Hall, personal communication), found only one questionable Paleo-Indian point in excavation and only two from peripheral hilltop sites. [Editor's Note: Two additional fragmentary *Plainview* points were recovered from Curtis Dusek's site 41 MC 10 by Bexar County Gifted and Talented youngsters conducting site surveys during the 1981 Texas Archeological Society Field School. These will be reported in Grant Hall's forthcoming Nueces River Project report.] The closest NRP sites (more than 200 were tested) lie within 12 kilometers of the Mule Creek Pasture.

THE ARCHAEOLOGICAL SITES

The Donnell Mule Creek Pasture of approximately 18 km² or 4,400 acres is located on the divide between the Frio and Nueces Rivers 20 kilometers southwest of Tilden (Figure 2). The eight sites (41 MC 153-160) are along intermittent Mule Creek and an eastward tributary which drain southeast into the Nueces River. Creeks immediately west, north, and east drain north into the Frio River. Vegetation is semi-desert scrub brush, grasses, and cactus with Pear cactus dominant. Cover varies from dense in the creekbottoms to nearly barren on some ridges with buff to red sandy clay often exposed.

Being in the divide between two drainages and with short outfall, the creeks neither build up deep flood plains nor promote heavy erosion. The buildup of new soil by decaying vegetation appears to be nearly in balance with the erosional factors of wind and water. Thus the sites today appear to be deflated with points and artifacts of all time periods lying on the surface which may be very little changed from Paleo-Indian times.

Today this is a marginal cattle-raising area with dirt tanks for the water supply. It is necessary in dry years to burn the Pear cactus and provide supplemental feeding (Jimnie Donnell, personal communication). Based on the very large and prolific Indian sites, the country must have been far more attractive in the past.

Sites 41 MC 153, 154, 155 are along an open ridge on the east side of the tributary creek with artifacts and chert debitage thinly scattered over a tract 100 to 300 meters wide (east-west) by 300 to 400 meters long (north-south). Occasional hearths of burned rock with increased debitage can be noted as discrete activity centers, but many occupations over a long time period are suggested by the sheer size of the sites and by the numbers and variety of the arrow and dart points found here by Brom Cooper, the Donnells and an unknown number of other collectors. (Brom Cooper has remarked on the number of collectors' tracks he has observed on the sites over a ten-year period.)

41 MC 156 This small (60-meter diameter) site in the flat east of Mule Creek is distinguished only by the finding there of a *Clovis* point. It was necessary to divert a root plow while surveying the site, and its subsequent plowing contributed nothing to its preservation.

41 MC 157 The site consisted of two small barren areas approximately 20 meters apart on the west bank of Mule Creek. These contain very fine debitage, and a hands-and-knees survey produced *Folsom* and *Plainview* bases and several Archaic dart points. The site is immediately below a knob hill which contains 41 MC 158.

41 MC 158 This knob hill site provides an excellent overlook of the Mule Creek Valley and was a major procurement source of chert cobbles (Uvalde Gravels). Extensive primary knapping activity took place over a 100-meter diameter area. Brom Cooper found a *Golondrina* point here as well as Archaic dart points.

41 MC 159 The site is on an eroded flat ridge of buff-to-red sandy clay on the high western flank of the valley. At 350-ft. elevation the site provides an excellent overlook of the entire valley and beyond. Several of Brom Cooper's Paleo-Indian points were found here. Other sites cluster very near the 300-ft. contour line.

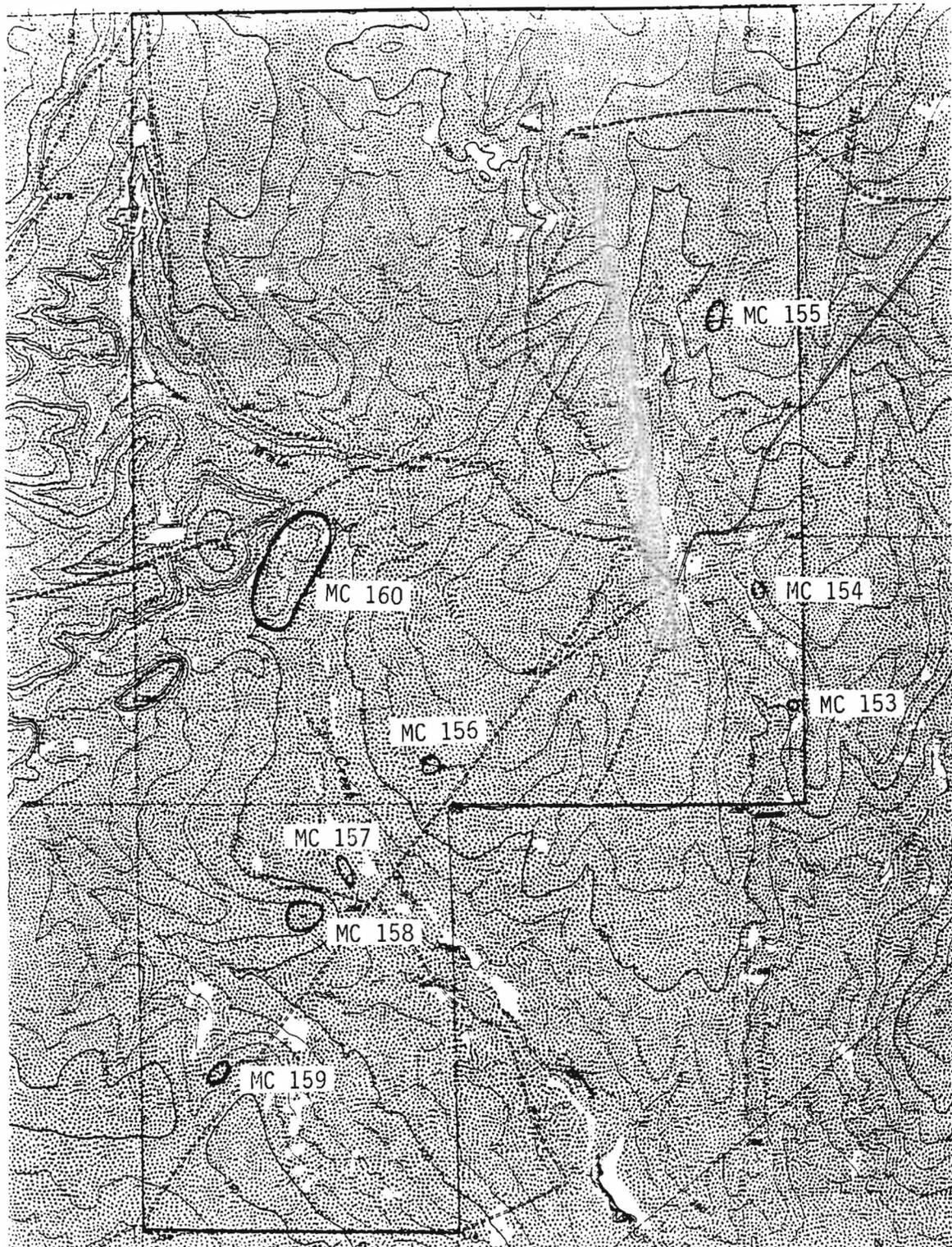


Figure 2. Section of contour map showing the Donnell Mule Creek Pasture with Sites 41 MC 153-160 indicated.

41 MC 160 A large flat area (200 by 400 meters) on the west bank of Mule Creek has eroded down to a buff clay and is covered with a thin scatter of debitage and artifacts. We found several Archaic points here, and it is also the site of the Brom Cooper *Scottsbluff* point. Extensive use of the site as a camp over a long time period is indicated by the point variety and size.

Settlement pattern: Except for some difference in size, all the sites are very much alike except for 41 MC 158 which was primarily a lithic resources procurement area, but even here other activity areas such as hearths were noted. All were selected as campsites many times over the complete span from Paleo-Indian to Late Prehistoric as indicated by the total Brom Cooper collection. None are far from the water source, Mule Creek and its tributary which incidentally must have carried more water than at present to have supported the aboriginal campers. No preference for the overlook sites by Paleo-Indians is indicated by the point collection, but it must be remembered that this may be a sampling problem because of the numerous collections made here over the past fifty years. Hall, *et al.* (1982) have commented on the adverse impact extensive artifact collecting has had on the archaeological record at nearby Choke Canyon. We have been extremely fortunate to have documented just one collector's activity. The Donnells also have an excellent collection that needs documenting.

The fact that we still found Paleo-Indian points during the site surveys indicates the extent and frequency of Paleo-Indian utilization of the area.

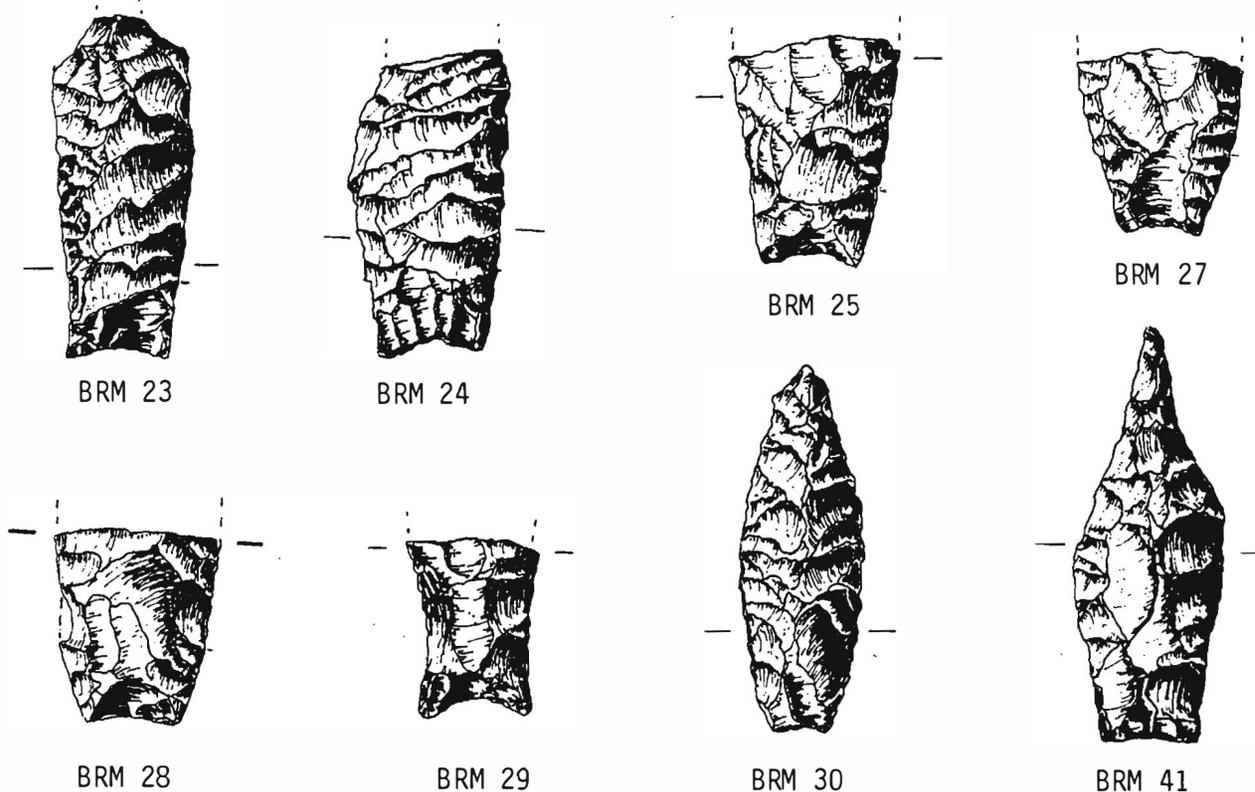
THE PROJECTILE POINTS

TEXAS ANGOSTURA: 7 specimens (the eighth, BRM 29, was rejected from the *Angostura* classification and is designated as a new type).

Description: Narrow leaf-shaped points, basal edges always ground, base edge sometimes ground. The predominant type flaking is irregular, but BRM 24 and BRM 25 have fine, narrow, oblique, parallel flaking like the *Angostura* type site points from South Dakota and Wyoming (Hughes 1949). This attribute is found on one specimen from nearby San Miguel Creek (Hester 1968) and on three of 11 in the Hasse Collection (ms, CAR files). The BRM specimens have slight basal concavities, 1 to 3 mm, while 6 of 8 points illustrated by Suhm and Jelks (1962:168) have convex bases (BCON range of +1 to -3 with dash (-) or negative numbers representing convex bases--see Table 1), and none apparently having oblique parallel flaking. The unfailing attribute that separates "Texas Angostura" from most other Paleo-Indian points is the narrow base (HPROX range 10 to 17 mm in the specimens so far analyzed; see Figure 3, Form for Classifying Paleo-Indian Points, and the *Texas Angostura* Data Table). BRM 24 has long, narrow, parallel base thinning scars (a *Plainview* attribute) but irregular and minimal base thinning is the norm as the bases are designed to fit into socketed foreshafts or shafts. The need to drill or bore out these sockets might explain the presence of points modified to drills as in BRM 23 and BRM 41.

The fragmentary nature of the Brom Cooper points plus confusion over what in Texas is an *Angostura* point (Alexander 1963, labels contracting stem, oblique parallel flaked points "Plainview Angostura"), provoked a computer assisted study with the identical programs, attributes and procedures used in an earlier *Plainview* versus *Golondrina* analysis (Kelly 1982a). Once the strength of the discriminating attributes was established, a revised classification form (Figure 3) was made up and seems to work rather well, although additional data are needed, especially from complete points, to establish a wider data base.

This program will reject from the *Texas Angostura* classification those other contracting stem Paleo-Indian points with deeply concave basal edges like BRM 29. "Victoria" is suggested for this type, as a number have been found in that county from the Johnson-Heller Site (Birmingham and Hester 1976:Figure 4) and from the J-2 Ranch (Fox, *et al.* 1978;Figure 4h).



Data from Wormington (1957:139), the only illustrated type site for *Angostura*, has been added to our *Angostura* Data Table, as has data from St. Mary's Hall, the Hasse Collection, Suhm and Jelks (1962) and Chandler (1982, 1983). Using our established Texas data, the point reported by Wormington does not classify as *Texas Angostura*. It is too wide, has oblique parallel flaking, is not narrow enough at the base, and tapers more gently as shown by the score "6" under TOTAL. Consequently, our use in Texas of the *Angostura* classification is not valid, and the points we are looking at should be called provisionally *TEXAS ANGOSTURA*. Wormington (*op. cit.*) cautions against the tendency to call all similarly-shaped points *Angostura*.

Final confirmation of the *Texas Angostura* is still awaiting an excavated type site, as is the case with the concave-edged, contracting base "Victoria" points noted above.

Raw Materials: BRM 23, 24, 26 and 30 are of high quality "slick" vitreous-looking homogeneous chert from purple to almost black in color. The rest are of poorer quality chert, varying from pinkish buff to light grey in color, probably the local Uvalde Gravels. The second group is highly patinated, while the first group is unpatinated, probably because of the nature of the chert.

Chronological Placement and Distribution: Suhm and Jelks (1962) list distribution for *Angostura* as the Great Plains from Central Texas north, probably to Canada. Since *Angostura* means different things to different people, this may be too broad a distribution. Further careful typological studies are indicated. Our *Texas Angostura* certainly extends south to the Gulf Coast. Victoria, San Patricio, Zapata, LaSalle, Kendall, Bexar and McMullen Counties, to name a few, are reported by Howard (1974), Hester, Miller and North (1978), Parker (1978), Chandler (1982, 1983) and Beasley (1983).

Radiocarbon dates of the *Angostura* type site of 6765 and 6123 B.C. are given by Wormington (*op. cit.*), although the materials used were not too closely associated with the type points. Hester (1976, 1980) dates *Angostura* as ca. 6000-5500 B.C. and they were found well above the *Plainview* deposits at St. Mary's Hall (Hester 1978). We are still waiting for an excavated and dated type site in Texas.

TABLE 1
TEXAS ANGOSTURA DATA

	BROM COOPER COLLECTION			ST. MARY'S HALL			HASSE COLLECTION			SUHM AND JELKS, 1962			CHANDLER (1982) (1983)			TEXAS ANGOSTURA RANGE (1957:13)			WORMING-TON (72) "thin"					
LENGTH THICK	6	6	5	6	6	8	7	7	5	7	74	58	61	61	83	85	74	89	71	70	58	58-89		
GREY	12	16	18	-	-	29	20	18	19	-	-	-	-	-	-	-	-	-	10	8	6	5-8		
BCON	1	2	2	2	3	1	1	1	0	3	0	0	2	0	-2	1	-3	1	0	1	2	12-30		
WIDTH	19	21	23	22	18	17	21	21	21	24	22	26	22	23	26	28	26	27	24	24	25	17-28	2	
HDIST	17	18	18	19	14	15	16	18	18	17	16	18	16	18	16	18	19	21	16	18	20	15-22	20	
HPROX	14	14	15	11	13	15	10	14	13	10	12	12	17	12	11	11	15	13	14	15	13	10-17	18	
HDIST-HPROX	3	4	3	8	6	-1	5	2	5	3	5	5	6	4	6	4	3	6	2	3	7	1-8	2	
WIDTH-HPROX	5	7	8	11	10	3	7	7	10	12	14	8	9	10	8	10	14	12	12	10	9	5-14	4	
TOTAL	8	11	11	19	16	2	12	9	15	20	14	29	29	11	14	15	13	16	18	12	12	19	8-29	6
TYFL	1	1	3	3	3	3	3	3	-	1	2	-	1	1	-	3	-	2	3	2	3	3	3	2
BTHIN	3	1	3	3	3	3	3	3	3	3	2	3	3	3	-	3	1	3	3	2	3	3	3	2
SCORE CLASS.	60%																						10%	
	X *																						X **	

* BRM 29 rejected - classified as a "Victoria" point.

** Type site point is also rejected as a *Texas Angostura*, which confirms the *Texas Angostura* as a separate type.

ATTRIBUTE	ANGOS-		GOLON-		PLAIN-	YOUR SPECIMENS
	TURA	%	DRINA	%	VIEW	
	RANGE ←	CLASS.	RANGE ←	CLASS.	→ RANGE	
LENGTH	58-89		55-80		50-74	
THICKNESS	5-8		6-8		5-7	
GRED	12-30		18-28		21-45	
BCON	-1 +3		4-10	40	1-4	
WIDTH	17-28		23-31		21-26	
HDIST	15-22		22-29		20-25	
HPROX	10-17	30	22-31		20-24	
HDIST - HPROX	1-8		-1 -4		-1 +1	
WIDTH - HPROX	5-14		-2 +2		0 +2	
TOTAL	8-29	40	0 -5	30	0 +3	
TYFL	3	20	3	20	1	
BTHIN	3	10	2	10	1	
			LENGTH SHORTEST FLUTE→			
SCORE %						
CLASS	A		G		P	

Measure to closest millimeter. BCON (Base Concavity) is '-' (minus) for convex bases. Measure HPROX at widest point of flared ears, at base if relatively straight, at beginning of curve if convex base. Measure HDIST at 10 mm above base, WIDTH arbitrarily at 20 mm above base for basal fragments, otherwise at the widest point above that. These three width measurements together define parallel, recurved, or contracting stem points. TYFL: 1 = Horizontal parallel; 2 = Oblique (diagonal) parallel; 3 = Irregular flaking, BTHIN: 1 = Long narrow vertical scars; 2 = Short lunate scars; 3 = Irregular base thinning; 4 = Base thinning from edges (as in *Milnesand*); 5 = Fluted base thinning. (This system will also classify *Clovis* and *Folsom* points if the length of the shortest flute is measured and compared to the total length and thickness of the point.)

.....
 Drawing, Provenience, Material, etc.

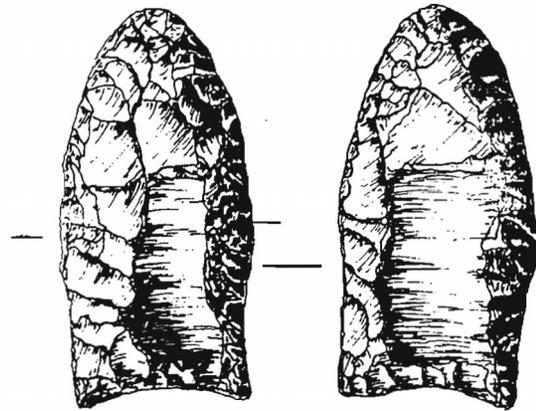
Figure 3. Classification Form. For specific scoring instructions, see Kelly (1982a&b).

CLOVIS: 1 specimen, BRM 36

Description: The 51-mm long specimen is lanceolate with a wide flute (14 mm wide and 28 mm long) on one face with the reverse flute being 8 to 11 mm wide and 28 mm long. The basal edges and concavity are heavily ground with one edge straight and the others slightly recurved from the grinding rather than from deliberate flaking. After fluting, the base was further thinned by a series of short lunate spalls. Maximum thickness (8 mm) is near the present tip which is not the original tip. However, the fine narrow flake scars are equally patinated with the rest of the point. The thickness and consequent weight of 12.5 grams, would never allow it to be confused with a *Folsom* point. The *Folsom* points, BRM 38 and BRM 39, are only 3 mm thick and weigh 1.46 and 2.12 grams. The basal concavity is 3 mm in depth with a slight recurve.

Raw Material: Dark Honey-colored chert with small buff-colored inclusions. A light patina is visible on the ridges of flake scars.

ATTRIBUTE	(mm)
LENGTH	51
THICK	8
GREED	21
BCON	3
WIDTH	25
HDIST	23
HPROX	24
TYFL	3
BTHIN	5
FLUTE	27
WEIGHT	12.5 grams



BRM 36

Chronology and Distribution: Suhm and Jelks (1962) show distribution across the United States and from Canada to Costa Rica with estimated dates from 15,000 B.C. to 10,000 B.C. Wormington (1970) gives an excellent summary of *Clovis* and other fluted points. More recent developments suggest that the *Clovis* rubric should probably apply only to the Mammoth hunters of the southwest, with radiocarbon dating ca. 10,000 B.C.

Fluted points have been found associated with Mastodon bones near St. Louis (Anonymous 1979). Heavy fluted points with deep basal concavities have been found in Nova Scotia (McDonald 1968) and in northern Maine (Gramley 1982) associated with Caribou hunting groups and with dates of 8350 B.C. and 9170 B.C. The Colha Project found the first fluted point ever found in Belize (Hester, Kelly and Ligabue 1981) but it is referred to as the *Ladyville Fluted* point rather than *Clovis* which it closely resembles. South Texas has so far produced *Clovis* points only from surface finds: Orchard and Campbell (1954), Bexar County; Skinner and Rash (1969), Hood County; Hester (1974), Dimmit, Duval, Zavalla, San Patricio, Victoria, and Atascosa Counties; Meier and Hester (1976), Fayette County; Carroll (1978), Val Verde County; Hudgeons (1979), DeWitt County; and Chandler (1982, 1983), San Patricio and Kendall Counties. Suhm and Jelks (1962) illustrate *Clovis* points from Calhoun, Harris, Deaf Smith, Dallas, and Tyler Counties.

Classification: The same computer programs used in the *Plainview*, *Golondrina* and *Angostura* Programs will also classify *Clovis* points (and incidentally separate our *Clovis* from the northeastern variety of fluted point mentioned above). Type

basal thinning, "5", fluted, and the measurement of the shortest flute length are the only additional measurements. The computer-derived simple manual test to separate *Clovis* from *Folsom* is to compare the length of the point to the shortest flute length and multiply by the thickness: $L/FL \times T = ?$. A limited number (10 each) of such tests produced numbers like 15, 17, 28, 55 for *Clovis* and 4.4, 5.6, 7.6, and 9.2 for *Folsom*. *Clovis* numbers, then, are greater than 15, while *Folsom* numbers are less than 10. Data, please?

Following is an example of the possible usefulness of this test:

House (1974) reported a fluted point from Live Oak County which he called "Folsomoid." With a weight of 8.3 grams, a thickness of 7 mm, length of 51 mm and the shortest flute length of 18 mm, by applying our simple test: $L/Fl \times T = 51/18 \times 7 = 19.8$, a number within the *Clovis* range. If our test is valid, the point is not "Folsomoid," a rather valueless term for typological use anyway, but *Clovis*, still widely accepted as the earliest of North American projectile points. BRM 36, applying the same test, gives: $51/27 \times 8 = 15.1$. Both points appear to have been broken and repointed, and the test numbers would be even larger if we had the original lengths. Because of this factor of reutilizing broken points, the Attribute LENGTH by itself has little discriminating value in comparing Paleo-Indian collections.

The length of the shortest flute was chosen because that almost certainly is where the haft foreshaft terminated in the *Clovis* point and may have statistical significance when we have data from enough points. Why are *Clovis* and *Folsom* points fluted? Beyond the factors of style and cultural templates (Wheat 1976) there must be functional reasons why such a difficult and costly (Tunnell 1975) technique was used over a long time period. A cursory study of the geometry of hafting indicates that the flutes would permit a more streamlined joining of the foreshaft and point which would in turn permit deeper penetration and more killing power. There should also be better resistance to stress when point edges are used in butchering (see Kelly 1982a). Adequate testing of these theories by hafting, penetration, and butchering with replicated points must be done.

FOLSOM: 2 specimens, BRM 38, BRM 39

Description: BRM 38 is a basal fragment with an outline identical to some of the Miniature South Texas *Plainview* points. The sides round off slightly at the base which is incut 4 mm in an inverted "U" shape. The basal edges and concavity are well ground. A single off-centered channel flute 11 mm wide is on one face with two very neat parallel flutes 4 mm and 7 mm wide on the reverse. The greatest thickness is 3 mm with the thickness at the fluted portion being 2 mm. Width is 21 mm, HPROX



BRM 38

BRM 39

is 19 mm and the weight is 1.46 grams. BRM 39 is another basal fragment with one straight edge. The opposite edge tapers 2 mm in its 22 mm length. Small fragments are missing from the basal ears. The semicircular basal concavity is 3 mm deep but was probably about 4 mm when the ears were intact. The flute on one face is 11 mm wide and slightly off-center. The other flute is badly off-center and only 7 mm wide. The flaking is very fine, thin horizontal parallel. The greatest thickness is 3 mm with only 1 mm between flutes at the basal end. Weight is 2.12 grams. Edges and concavity are lightly ground.

Raw Material: BRM 38 - nearly transparent milky agate with very light white patination. BRM 39 - exotic light purple-tinted translucent grey chert. Vitreous with a slick feel.

FOLSOM Preform: 1 specimen, BRM 40

Description: Basal fragment with sides tapering slightly to basal ears. There is a prominent tit in the middle of the base that would have been used in pressing of the first flute if the preform had not broken. The fragment otherwise closely resembles *Plainview*. It is quite thick at the break, 8 mm, tapering to the base which was the distal end of a blade. The arris is still visible on one face, and the other face is nearly flat. It weighs 5 grams, is 22 mm long, 22 mm wide at the break, HDIST is 22 mm and HPROX is 21 mm. Neither basal edges or base are ground, a condition which could be expected for unfinished Paleo-Indian points. The flaking appears crude except for very fine, careful flaking of base ears and tit. Tunnell (1975: Figure 2) illustrates a very similar preform and states that grinding the edges was probably the final step in making Paleo-Indian points (ibid:16), an opinion or observation shared by Judge (1973:176). Ground basal edges will eventually be accepted as an attribute of finished Paleo-Indian points.

Raw Material: Fair quality brown chert with lighter inclusions, probably the local Uvalde Gravel. This fragment is a good argument for the local production of *Folsom* points.

Chronology and Distribution: These are the only *Folsom* points so far reported from McMullen County. Hester (1974) reports *Folsom* points from Dimmit, Gonzales, Karnes, Nueces, Webb, Zapata, and Zavala Counties. The most important *Folsom* site in South Texas unfortunately has not yet been reported in the archaeological literature. Site 41 BX 52 was excavated by the Texas Highway Department on Leon Creek, just off the U.T.S.A. campus, and is the only excavated *Folsom* site in South Texas. Tunnell (1975) provides an excellent description of *Folsom* manufacturing techniques from study of the debitage of the rich Adair Steadman site in Fisher County.

The *Folsom* type site near Folsom, New Mexico (Cook 1972, Figgins 1972) was the first North American site that proved man's antiquity in the New World. The Lindenmeier site in northern Colorado (Roberts 1935) convinced the last skeptics when *Folsom* points were found in close association with extinct bison and camel.

Hester (1980) gives ca. 8500-8800 B.C. for *Folsom* dates. Frison (1981) reports dates of ca. 7900 to 8900 B.C.



BRM 40

GOLONDRINA: 5 specimens, BRM 01-05

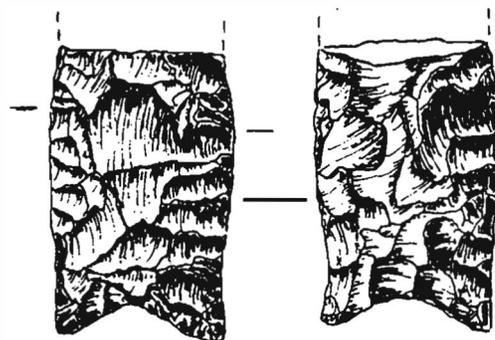
Description: The *Golondrina* points, all basal fragments, are lanceolate with recurved broad basal edges and deep basal concavities (more than 4 mm) varying from flattened inverted "V" to recurved. Flaking is irregular with base thinning usually by short lunate flake scars. They are wider and heavier than the *Plainview* points and all others except the single *Scottsbluff* point in the collection. The expanding swallow-tail (*Golondrina*) base lends itself only to "split stick," or clothespin hafting (see Kelly 1982a). Both basal edges and concavities are heavily ground.

Raw Material: All points are of fair quality Uvalde Gravel from pink-tinted buff to mottled purplish grey.

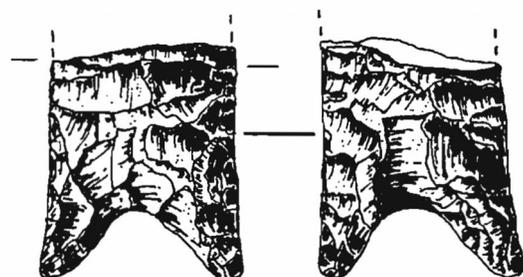
GOLONDRINA DATA

Specimen Label	BRM					
Specimen No.	01	02	03	04	05	
ATTRIBUTES						RANGE*
LENGTH	(36)	(31)	(40)	(22)	(18)	55-80
THICK	7	6	5	6	6	6-8
GREY	23	25	25	-	-	18-28
BCON	5	9	7	5	7	4-10
WIDTH	24	-	24	-	-	23-31
HDIST	22	25	22	24	24	22-29
HPROX	23	28	26	25	25	22-31
HDIST-HPROX	-1	-3	-4	-1	-1	-1 -4
WIDTH-HPROX	1	-	-2	-	-	-2 2
TOTAL	0	-3	-4	-1	-1	0 -5
TYFL	3	3	3	3	3	3
BTHIN	2	2	2	2	2	2
SCORE	100	100	100	100	100	
CLASS.	G	G	G	G	G	

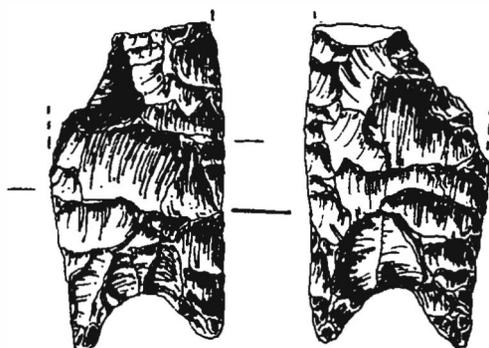
* Kelly (1982a)



BRM 01



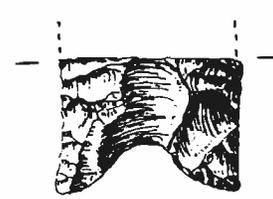
BRM 02



BRM 03



BRM 04

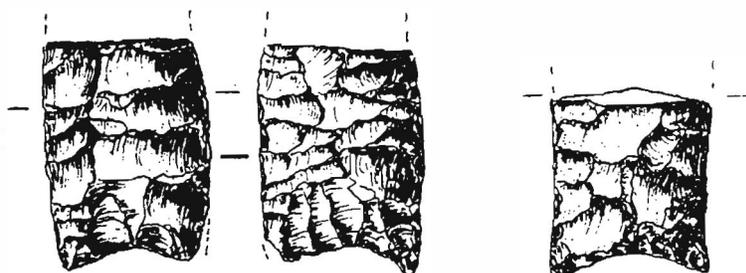


BRM 05

Chronology and Distribution: Hester (1980) dates *Golondrina* points from 7080 B.C. to 6830 B.C. Primarily South Texas. (See Kelly 1982a for distribution map.)

PLAINVIEW: 2 specimens, BRM 15, BRM 18

Description: BRM 15 is a basal fragment 22 mm long, 6 mm thick, shortest ground edge of 21 mm. The basal concavity is 3 mm deep and is not ground there would be no need for grinding the base end if they were hafted, as Knudson (1973) suggests, in a rib bone foreshaft. Only the base edges would bear against the foreshaft. The widest part (WIDTH = 23) occurs just below the break, and the edges contract gently to the base (HDIST = 22, HPROX = 21). One face has wide horizontal flake scars while the reverse has narrow horizontal parallel scars (TYFL = 1). The base was thinned with narrow parallel flakes (BTHIN = 1). It scores 100% *Plainview* in the classification system.



BRM 15

BRM 18

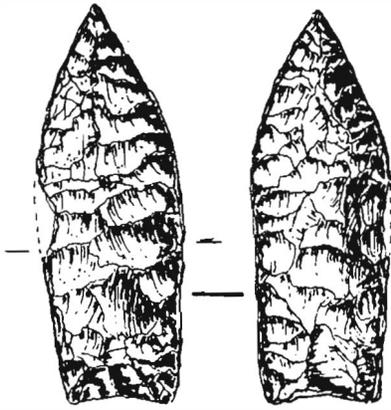
BRM 18, also a basal fragment, is 22 mm long, 6 mm thick, with edge grinding the length of both edges. The basal concavity is 3 mm deep and very lightly ground. The greatest width is at the break, and the angle at which it is contracting indicates the maximum width was somewhere above, WIDTH = (22). At 10 mm above the base it is 20 mm wide (HDIST = 20). The basal edges have a slight recurve to the base (HPROX = 21). Wide horizontal flake scars are present on both faces with irregular base thinning scars (TYFL = 1, BTHIN = 3). It scores 90% *Plainview*. Computer plots place both points well within the *Plainview* parameters.

Raw Material: BRM 15 is of purplish tinted buff, good quality chert. BRM 18 is buff yellow, fair quality chert. Both are the locally prevalent Uvalde Gravels.

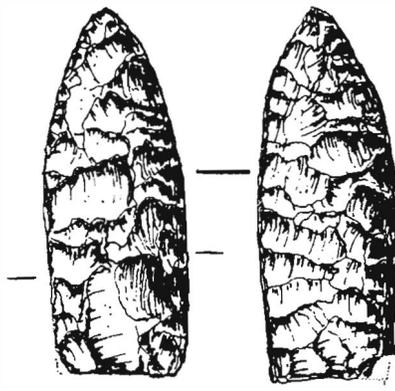
MINIATURE PLAINVIEW: 12 Brom Cooper specimens and three loaned by C. K. Chandler: CKC 10, CKC 11, CKC 12, are analyzed.

Discussion: Initially all points that looked like *Plainview* or *Golondrina* were measured and placed in the computer programs: Step Discriminant Analysis, Dixon (1974) and Factor Analysis, Nie, *et al.* (1975) as described in Kelly (1982a). The *Golondrina* points and specimens BRM 15 and BRM 18, fell neatly into the *Plainview* and *Golondrina* categories. However, 12 BRM points (later augmented by the three CKC points to enlarge the data base) fell outside the *Plainview* type parameter, clustering on one end and part of one side (see Figure 4). The factors causing the multiple clusters were the attributes of length and the three width measurements, all a few millimeters smaller than the "normal" type *Plainviews*. They are otherwise identical to *Plainview* in every detail. Typologically it is advantageous to be able to discriminate between the sub-group and the total *Plainview* population, hence the hopefully temporary rubric "Miniature Plainview."

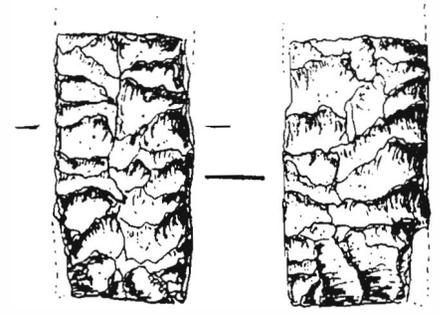
Several cultural implications are suggested for future testing. The miniaturization of South Texas points in later time periods has been previously noted as



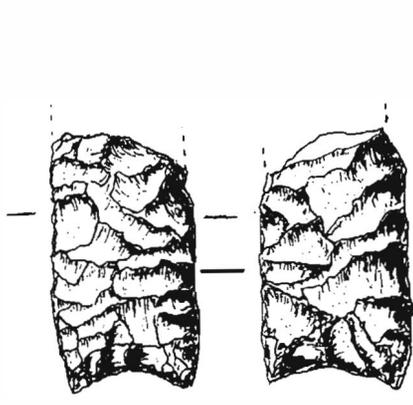
BRM 06



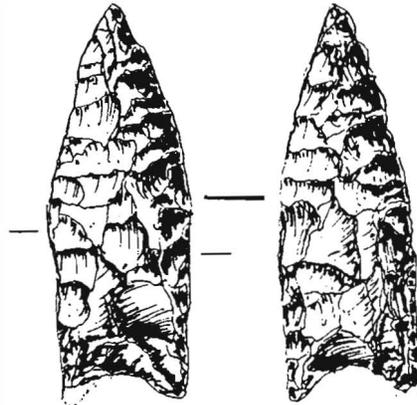
BRM 07



BRM 08



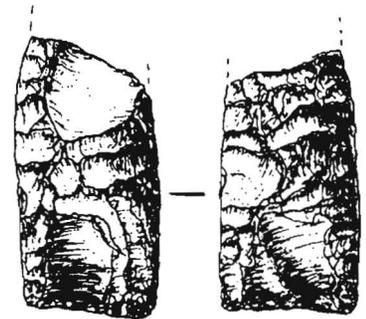
BRM 09



BRM 10



BRM 11



BRM 12



BRM 13



BRM 14



BRM 16



BRM 17



BRM 19



CKC 10



CKC 11



CKC 12

Miniature Plainview

TABLE 2
MINIATURE PLAINVIEW DATA

ATTRIBUTE	Cooper (Prefix BRM)										Chandler (Prefix CKC)						Comparative <i>Plainview</i> Data*				
	06	07	08	09	10	11	12	13	14	16	17	19	10	11	12	Mean	Max	Min	Mean	Max	Min
LENGTH	51	49	(35)	(34)	52	43	(36)	(23)	(22)	(22)	(20)	(26)	46	53	52	50.8	55.0	46.0	65	74	51
THICK	6	7	6	6	8	6	7	6	6	6	6	5	6	6	8	6.3	8.0	5.0	6	8	5
GREY	21	17	24	23	19	16	17	(23)	(22)	(22)	(20)	(23)	16	27	23	20	27	16	32	45	21
BCON	2	2	1	3	3	1	1	3	3	2	2	1	2	2	4	1.3	4.0	1.0	2.3	4	1
WIDTH	19	19	19	20	20	17	19	20	19	20	18	19	19	20	19	19.1	20.0	17.0	23.7	26.0	21.
HDST	18	18	19	20	18	16	19	19	18	20	18	19	18	19	19	18.2	20.1	16.0	23.0	25.0	20.
HPROX	16	(15)	(17)	19	18	15	18	18	19	19	18	18	18	19	18	17.9	19.0	16.0	22.6	24.0	20.
TYFL	1	1	1	1	3	1	2	1	1	1	1	2	1	1	1	1.2	3.0	1.0	1	1	1
BTHIN	1	1	2	2	2	2	2	2	2	3	2	2	1	2	1	1.8	3.0	1.0	1.2	2.0	1.

* From Knudson (1973) and Kelly (1982a)

Matamoros for *Tortugas* and *Catan* for *Abosolo* by Suhm and Jelks (1962) and Woerner and Highley (1983). Do these *Miniature Plainview* points represent a late development of *Plainview*? Are they smaller because of differences in available raw material? (The area Uvalde Gravels occur as fairly small nodules: Grant Hall, personal communication.) Were the people hunting smaller game in the South Texas area thus requiring a lesser "caliber" weapon for killing and butchering? An excavated type site is badly needed. Meanwhile, you can provide more needed type and distributional data.

Description: Except for size, the *Miniature Plainview* points are identical to the type site specimens. Workmanship is fine to exceptional, depending somewhat on the quality of the chert. The Uvalde Gravels rarely have the exotic chert found on the High Plains. Table 2, "*Miniature Plainview* Data," and the accompanying drawings should provide an adequate description.

Raw Material:

BRM 06 - Light tan, high quality chert with small buff inclusions. Glossy, vitreous heat-treated material that permits long, neat flake removal. Edwards Plateau chert. Excellent workmanship.

BRM 07 - Buff-colored, good quality chert with some small step fractures. Local Uvalde Gravel. Fair workmanship.

BRM 08 - Good, light tan, homogeneous chert, buff-colored and some step fractures. Good workmanship. Uvalde Gravel.

BRM 09 - Dark tan, high quality chert (homogeneous) with small buff inclusions, possibly heat-treated. Edwards Plateau. Excellent workmanship.

BRM 10 - Dirty-yellow colored, poor quality chert with attendant short flake scars and step fractures. Poor workmanship. Uvalde Gravel.

BRM 11 - Pinkish-yellow, homogeneous, fair quality chert with step fractures and irregular flake scars. Uvalde Gravel. Fair workmanship.

BRM 12 - Tan, good quality chert with large buff inclusions. Some long flake scars and pot-lidded, possibly heat-treated. Good workmanship. Uvalde Gravel.

BRM 13 - Dark tan, vitreous, heat-treated, high quality chert with some buff inclusions. Flake scars wide and long. Edwards Plateau. Good workmanship.

BRM 14 - Grey tan, good quality chert with small buff inclusions. Scars in matched pairs. Uvalde Gravel. Good workmanship.

BRM 16 - Pearl grey with slight white patina. Good quality heat-treated chert with large inclusion at break, possibly a contributing factor. Uvalde Gravel. Fair workmanship.

BRM 17 - Dirty-yellow, buff-colored, poor quality chert with irregular fracture scars. Uvalde Gravel. Poor workmanship.

BRM 19 - Dirty-yellowish sandy brown, poor quality chert. Difficult to distinguish individual flake scars. Uvalde Gravel. Fair workmanship.

Remarks: Three of twelve points are of "imported" Edwards Plateau chert, and two of these are heat-treated and the only ones rated excellent. The third is rated good. Only two of the points of Uvalde Gravel are rated good. There seems to be a direct correlation between the quality of the chert and the quality of the work.

Chronology and Distribution: McMullen and San Patricio Counties. None have yet been reported from excavated sites. Data badly needed.

SCOTTSBLUFF: 1 specimen, BRM 37

Description: This basal fragment is broken just above the stem at 40 mm length. The greatest thickness is 7 mm at the break. Both the stem edges and base are lightly ground with the shortest ground edge being 21 mm. The widest point is also at the break (31 mm). The stem is slightly incut (HDIST = 29, HPROX = 30), with one shoulder at right angles to the stem and the other sloping forward toward the blade. Wide horizontal parallel flake scars are skillfully matched up side to side. The base is wedge-shaped by a series of small parallel flake scars. This is the most massive point in the collection and comes within one millimeter of fitting perfectly over specimen E, Plate 123, Suhm and Jelks (1962) from Dallas County, Texas.

Raw Material: Exotic top quality translucent chert, honey-colored, with no discernible patina. This material is not from the local area Uvalde Gravels.



BRM 37

Chronology and Distribution: This is the first *Scottsbluff* reported from McMullen County and almost closes the "gap" when plotted on the Hester and Hill (1971:28) *Scottsbluff* distributional map, between the western cluster (Frio, Dimmit, and Zavala Counties) and the eastern cluster (Bee, Colorado, Goliad and Victoria Counties). Suhm and Jelks (1962:245) suggest their distribution is exclusive to the eastern part of Texas, with illustrated points from Anderson, Cass, Dallas, and Gregg Counties. Birmingham and Mitchell (1978:Figure 1B) illustrate another point identical to BRM 37, from J-2 Ranch, Victoria County.

The type site was an extinct bison species quarry near Scottsbluff, Nebraska (Barbour and Schultz 1932; Schultz and Eiseley 1935). Frison (1981) also associates them with *Alberta* points from Alberta and Saskatchewan, Canada. He dates the Cody Complex from 6450 B.C. to 7050 B.C.

No dates have yet been established in Texas.

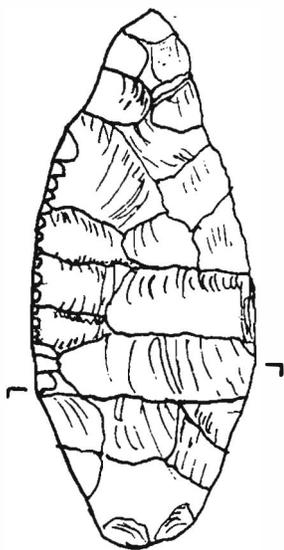
"ZELLA": 3 specimens, BRM 41, BRM 42, BRM 43

Description: These wide, leaf-shaped points have narrow, straight to convex bases, basal grinding, excellent horizontal, wide, parallel flake scars, and the bases are primarily thinned from the sides (BTHIN = 4) like *Milnesand* points. They are quite thick at 8 mm to 9 mm.

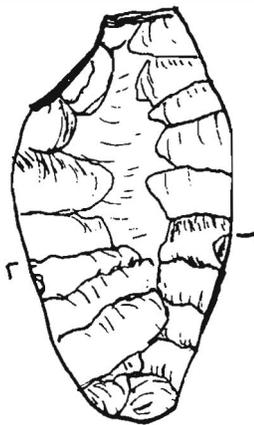
Raw Material: All are of light tan chert of good quality, probably not of local origin.

Discussion: Similar points are occasionally found in South Texas collections and are usually called *Angostura*. Suhm and Jelks (1962:Plate 84,G) show an identical point as *Angostura*. Wormington (1957:269) defines *Angostura* as "slender lanceolate points.... The base is either shallowly concave or irregularly straight." The type site *Angostura* specimens also have narrow, oblique, parallel flaking (Hughes 1949).

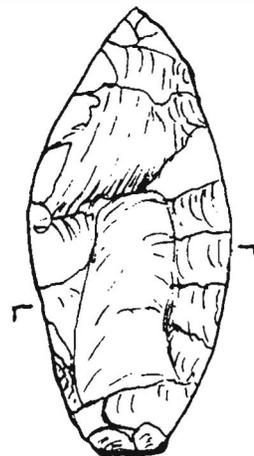
The *Zella* point (named after the Donnell Ranch Headquarters which used to be a railroad stop) differs in being comparatively wide with horizontal, wide, parallel flaking and straight to markedly convex base. When their data is entered into the present Paleo-Indian computer analysis program, they are plotted as a cluster at one end of the *Angostura* parameter. However, given enough data on what we are presently calling *Angostura*, we are almost certainly going to find at least three types that can be distinguished from each other: the type site *Angostura* with long, slender, lanceolate bodies having narrow, oblique parallel flake scars and concave bases; a type herein labeled *Texas Angostura* with irregular flaking and concave bases; and our temporary or tentative type, *Zella*, with straight or convex bases and horizontal, wide, parallel flake scars; and possibly even a fourth (*Victoria*) found in Victoria County and elsewhere with deeply concave stem edges that produce slight shoulders. Given enough data, the computer programs and their derived simple manual classification systems used here plus distribution and eventual dating will resolve this problem.



BRM 41



BRM 42



BRM 43

PROVISIONAL ZELLA POINT DATA

ATTRIBUTE	BRM 40	BRM 41	BRM 42	RANGE	TEXAS ANGOSTURA RANGE
LENGTH	69	(54)	59	59-69	58-89
THICK	8	8	9	8-9	5-8
GRED	21	21	15	15-21	12-30
BCON	-2	-2	0	0 -2	-1 +3
WIDTH	27	29	27	27-29	17-28
HDIST	21	18	20	18-21	15-22
HPROX	12	10	12	10-12	10-17
HDIST-HPROX	9	8	8	8-9	1-8
WIDTH-HPROX	15	19	15	15-19	5-14
TOTAL	24	27	23	23-27	8-29
TYFL	1	1	1	1	3
BTHIN	4	4	4	4	3
*SCORE %	70	70	70	70	100

* From Classification Form using *Angostura* Percentages.

The significant differences between *Zella* and *Texas Angostura* are in WIDTH, HDIST - HPROX, TYFL, and BTHIN. Based on only three specimens, it is obvious that more data are needed.

MATERIALS AND WORKMANSHIP

Archaic points from these same sites (Woerner and Highley 1983) were 87% (629 of 720) chert, almost entirely the available Uvalde Gravels. Six percent were quartzites, 4% silicified woods, 2% chalcedony, and .5% jasper. A cursory examination of the points indicates workmanship was poor to good with the most consistent good or better workmanship in the *Langtry* points.

The Paleo-Indian points show a strikingly different preference for exotic "imported" high quality Edwards Plateau cherts, with a few of materials not found in either locale (personal experience, local "experts," and not necessarily the final word). The three earliest points, *Clovis* and *Folsom*, are translucent, honey-colored and pearl-grey material with one *Folsom* nearly-transparent, milky-colored agate. *Clovis* workmanship was fine with both *Folsom* specimens rated outstanding. The *Folsom* preform, a failure, was Uvalde Gravel. The two *Plainview* points were of Uvalde Gravel, with one heat-treated to a purple tint and of finer workmanship.

Four *Miniature Plainview* points were of untreated buff-to-yellow Uvalde Gravel, one was buff quartzite, four were of heat-treated top quality Edwards Plateau brown cherts, and one was of heat-treated chalcedony.

The five *Golondrina* points were all of Uvalde gravels, buff-to-yellow, but three were heat-treated with pink-to-purplish tints. The workmanship looks almost poor when compared to the other Paleo-Indian points.

Four *Angostura* points were of fine heat-treated Edwards Plateau chert with dark glossy purple-to-light-brown colors. Three were of untreated Uvalde Gravels and one (modified to a drill) was pink heat-treated Uvalde Gravel. Two with fine narrow, parallel, oblique flake scars were of exceptional workmanship, with the others good to excellent. The *Zella* points are heat-treated purplish-tinted chert with excellent workmanship, probably Edwards Plateau.

The single *Scottsbluff* point is of exotic honey-colored translucent heat-treated material, source unknown. The workmanship is also exceptional, with wide, horizontal, parallel flake scars matching right across both faces.

A direct correlation is evident between the quality of workmanship and the quality of materials in this Paleo-Indian collection.

"Imported" has occasionally been used to describe the finer quality materials, but geologically the Frio River must have done some importing on its own, as it originates in the Edwards Plateau cherts. Our Paleo-Indian probably spent more time in his procurement of the better materials rather than carrying it with him when he came.

CONCLUSIONS

The 35 Paleo-Indian points collected from a comparatively small area of McMullen County have prompted a closer look at South Texas typology. The *Angostura* type has become a catch-all with four types that can be distinguished by dimensional analysis. The provisional (temporary) *Zella* type has been described as one step in resorting the *Angostura* classification. *Texas Angostura* has been suggested as another tentative classification to separate type site *Angostura* points from our most prevalent Texas contracting base point. A fourth type with sharply concave basal edges and rudimentary shoulders should probably be labeled *Victoria* after the county that so far has reported the greatest number. Not enough data is yet available for successful dimensional analysis.

The previously-noted miniaturization of South Texas points has herein produced a *Miniature Plainview* category of points that can be distinguished from the type site *Plainview* only by their smaller size. The option of merely enlarging the range of *Plainview* attributes will depend on more reporting of the type and possibly temporal and spacial differences not yet established.

RECOMMENDATIONS

Typology is too important to South Texas archaeology (and Texas as a whole also) to permit further careless reporting of projectile point data. The attributes used in this paper are minimal acceptable measurements. (A statewide symposium on the subject of Typology has recently been suggested by our *La Tierra* editor, Jimmy Mitchell.)

If possible, projectile points should be published actual size only, and in every case a millimeter scale must be included. The HDIST or measurement of width 1 cm above the base used in the classification form is a critical measurement as it both provides a crude description of the base shape, and an indication of the hafting method.

ACKNOWLEDGMENTS

I am indebted to all of you who responded to my request for *Plainview* and *Golondrina* data (Kelly 1982b) and now hope you will do the same with all Texas Paleo-Indian points: Bill Birmingham, Smitty Schmiedlin, R. E. Forrester, Jr., J. A. Jaquier, Malcom Johnson, A. V. McFarland, Charles R. "Bob" Bell, Howard D. Land, Richard, Ben, and Mike McReynolds, and Tom Miller. I owe Grant Hall for many interesting discussions on Choke Canyon and archaeology in general. Thanks to C. K. Chandler for the loan of *Miniature Plainview* points and other typological information. Line drawings were done by Al McGraw.

I must thank Brom Cooper both for the donation of this Paleo-Indian collection to U.T.S.A. and for his help in the survey of the archaeological sites--my apologies, Brom, for taking so long with this paper; Jimmie Donnell and his son "Tiger" for showing their collection and a guided tour of the ranch. Dr. Thomas R. Hester for his continued interest and help in my typological studies.

References

- Alexander, Herbert L., Jr.
 1963 The Levi Site: A Paleo-Indian Campsite in Central Texas. *American Antiquity* 28:510-529.
- Anonymous
 1979 New Discoveries Near St. Louis Finally Confirm Man and Mastodon Relationship in Eastern America. *Early Man, Magazine of Modern Archaeology*. Summer.
- Barbour, E. H., and C. Bertrand Schultz
 1932 The Scottsbluff Bison Quarry and Its Artifacts. *Nebraska State Museum Bulletin* 34, Vol. 1. Lincoln.
- Beasley, Tom S.
 1982 Paleo-Indian Artifacts from a Site in McMullen County. *La Tierra* 9(3): 34-38.
- Birmingham, William W. and Thomas R. Hester
 1976 Late Pleistocene Archaeological Remains from the Johnston-Heller Site, Texas Coastal Plain. In: Papers on Paleo-Indian Archaeology in Texas: 1. Center for Archaeological Research, The University of Texas at San Antonio, Special Report 3.
- Birmingham, W. W. and J. L. Mitchell
 1978 Scottsbluff Points from the J-2 Ranch. *La Tierra* 5(1):19-20.
- Carroll, William B.
 1978 Notes on Two Obsidian Paleo-Indian Points from Val Verde County, Texas. *La Tierra* 5(3):15-16.
- Chandler, C. K.
 1982 Paleo-Indian Projectile Points from San Patricio County, Texas. *La Tierra* 9(3):26-33.
 1983 Two Paleo-Indian Points from Kendall County. Manuscript submitted for *La Tierra* 10(4) issue.
- Cook, Harold J.
 1927 New Geological and Paleontological Evidence Bearing on the Antiquity of Mankind in America. *Natural History* XXVII(3):240-247.
- Dixon, W. J.
 1974 BMD: Biomedical Computer Programs. University of California Press.
- Dusek, Curtis D.
 1980 Plainview Points from 41 MC 10, McMullen County, Texas. *La Tierra* 7(3): 39-41.
- Figgins, Jesse Dade
 1927 The Antiquity of Man in America. *Natural History* XXVII(3):229-239.
- Fox, Anne A., E. H. Schmiedlin and J. L. Mitchell
 1978 Preliminary Report on the J-2 Ranch Site (41 VT 6), Victoria County, Texas. *La Tierra* 5(3):2-14.

Frison, George C.

- 1981 Plains Chronology. University of Wyoming (classroom handout).

Gramley, Richard Michael

- 1982 The Vail Site: A Paleo-Indian Encampment in Maine. *Society of Natural Sciences Bulletin* 30. Buffalo, New York.

Hall, Grant D., Stephen L. Black and Carol Graves

- 1982 Archaeological Investigations at Choke Canyon Reservoir, South Texas: The Phase I Findings. *Center for Archaeological Research, The University of Texas at San Antonio, Choke Canyon Series: Volume 5*.

Hemion, Roger

- 1980a Further Notes on the Bromley Cooper Collection from McMullen County, Texas. *La Tierra* 7(3):24-29.

- 1980b Ground and Notched Lithic Artifacts from McMullen County. *La Tierra* 7(4):30-33.

Hester, Thomas R.

- 1968 Paleo-Indian Artifacts from Sites Along San Miguel Creek: Frio, Atascosa and McMullen Counties, Texas. *Bulletin of the Texas Archeological Society* 39:147-161.

- 1974 On Fluted Points and South Texas Archeology. *Texas Archeology* 18(2):13-15.

- 1976 Late Pleistocene Aboriginal Adaptations in Texas. In: Papers on Paleo-Indian Archaeology in Texas (T. R. Hester, Editor). *Center for Archaeological Research, The University of Texas at San Antonio, Special Report* 3:1-14.

- 1978 Early Human Occupations in South Central and Southwestern Texas: Preliminary Papers on the Baker Cave and St. Mary's Hall Sites. *Center for Archaeological Research, The University of Texas at San Antonio, San Antonio*.

- 1980 *Digging Into South Texas Prehistory*. Corona Press, San Antonio.

Hester, Thomas R. and T. C. Hill

- 1971 Notes on *Scottsbluff* Points from Southern Texas. *Southwestern Lore* 37(1):27-33.

Hester, Thomas R., E. T. Miller and Cynthia North

- 1978 Notes on Paleo-Indian Projectile Points from Kerr and Bandera Counties. *La Tierra* 5(1):27-29.

Hester, T. R., T. C. Kelly, and G. Ligabue

- 1981 A Fluted Paleo-Indian Projectile Point from Belize, Central America. *Working Papers* 1. Colha Project. Center for Archaeological Research, The University of Texas at San Antonio, and Centro Studi e Ricerche Ligabue, Venezia. San Antonio.

House, Curt

- 1974 A Paleo-Indian Fluted Point from Live Oak County, Texas. *Texas Archeology* 18(2):1-4.

Howard, Calvin D.

- 1974 Paleo-Indian Surface Finds in Bexar County. *La Tierra* 1(3):14-17.

Hudgeons, Mark D.

- 1979 A *Clovis* Point Fragment from DeWitt County. *La Tierra* 6(1):24.

Hughes, Jack T.

- 1949 Investigation in Western South Dakota and Northeastern Wyoming. *American Antiquity* 14(4):266-277.

Jones, C. J.

- 1981 Sandstone Artifacts from Western McMullen County, Texas: The Bromley Cooper Collection. *La Tierra* 8(3):32-39.

Judge, W. James

- 1973 *Paleoindian Occupation of the Central Rio Grande Valley in New Mexico*. University of New Mexico Press, Albuquerque.

Kelly, Thomas C.

- 1982a Criteria for Classification of *Plainview* and *Golondrina* Projectile Points. *La Tierra* 9(3):2-25.
- 1982b Request for Suggestions on Criteria for Classification of *Plainview* and *Golondrina* Projectile Points. *Texas Archeology* 26(4):5-10.

Knudson, Ruth Ann

- 1973 *Organizational Variability in Late Paleo-Indian Assemblages*. PhD, Dept. of Anthropology, Washington State University.

MacDonald, G. F.

- 1968 Debert: A Paleo-Indian Site in Central Nova Scotia. *National Museum of Canada Anthropological Papers* 16. Ottawa.

McReynolds, Richard, Ben and Mike

- 1979 Additional Paleo-Indian Artifacts from San Miguel Creek, Atascosa County, Texas. *La Tierra* 6(2):20.
- 1980 Additional Late Paleo-Indian Artifacts from Southwestern Atascosa County, Texas. *La Tierra* 7(3):34-38.

Meier, Carl J., Jr. and Thomas R. Hester

- 1976 Paleo-Indian Artifacts from the Meier Site, Southeast Texas. *La Tierra* 3(1):16-19.

Mitchell, J. L.

- 1974 41 AT 18, An Archaeological Site in Atascosa County, Texas. *La Tierra* 1(1):32-36.

Mokry, E. R., Jr.

- 1976 Notes on Paleo-Indian Projectile Points from McMullen County. *La Tierra* 3(1):26-27.

- Nie, Norman H., C. H. Hull, K. Steinbrenner and D. Bent
 1975 SPSS - Statistical Package for the Social Sciences. Second Edition.
 McGraw Hill, New York.
- Orchard, C. D. and T. N. Campbell
 1954 Evidence of Early Man from the Vicinity of San Antonio, Texas. *Texas Journal of Science* 6(4):454-465.
- Parker, Wayne
 1978 Notes on Two Early Man Dart Points from Zapata County, Southern Texas. *La Tierra* 5(3):17-19.
- Roberts, Frank H. H., Jr.
 1935 A Folsom Complex: Preliminary Report on Investigations at the Lindenmeier Site in Northern Colorado. *Smithsonian Miscellaneous Collections Vol.* 94.
- Schultz, C. Bertrand, and L. C. Eiseley
 1935 Paleontological Evidence of the Antiquity of the Scottsbluff Basin Quarry and its Associated Artifacts. *American Anthropologist, New Series* 3(2):306-318.
- Skinner, S. Alan and Randle Rash
 1969 A Clovis Fluted Point from Hood County, Texas. *Bulletin of the Texas Archeological Society* 40:1-2.
- Suhm, Dee Ann and Edward B. Jelks
 1962 Handbook of Texas Archeology: Type Descriptions. *Texas Archeological Society Special Publication 1 and Texas Memorial Museum Bulletin* 4. Austin.
- Tunnell, Curtis
 1975 Fluted Projectile Point Production as Revealed by Lithic Specimens from the Adair-Steadman Site in Northwest Texas. Paper presented at a symposium on Paleo-Indian Lifeways held at the Museum, Texas Tech University, Lubbock, Texas, October 16-18.
- Wheat, Joe Ben
 1976 Artifact Life Histories: Cultural Templates, Typology, Evidence and Inference. In: *Primitive Technology and Art*, J. S. Raymond, et al., Editors. University of Calgary Association.
- Woerner, Michael C. and Lynn Highley
 1983 The Bromley F. Cooper Collection of Pre-Archaic and Archaic Dart Points from McMullen County. *La Tierra* 10(1):3-28.
- Wormington, H. M.
 1970 Ancient Man in North America. *Denver Museum of Natural History, Popular Series* 4. Denver.

PROBLEMS IN TYPOLOGY: THE CASE OF THE "MEDINA" POINTS

Thomas R. Hester

In a recent issue of this journal, Carroll (1983) set forth a projectile point type description for specimens that he refers to as "Medina." Upon reviewing the data presented in that paper, it is my opinion that these are simply *La Jita* points, a type defined from the excavations at site 41 UV 21 (the La Jita site) in Uvalde County, Texas (Hester 1971:74-75). I defined *La Jita* as a "tentative type" and provided descriptions of specimens from that site and two other sites in Bandera and Real Counties. Illustrations of these artifacts in my 1971 paper are admittedly not very clear, although I see no difference between some of Carroll's (1983:Fig. 2) illustrated artifacts and those shown in my Figure 11,d,e. I think that the verbal descriptions provided in my paper would clearly indicate that "Medina" points should be included within the *La Jita* type. It is unfortunate that Carroll (1983:31) chose to focus only on a part of my description--regarding the beveling and concavity found on some stems of these points. The metric data presented by Carroll (1983:29) in his sample of specimens also overlap with data from the La Jita type site.

In short, based on the published description of *La Jita* points, I would include, on the basis of shape, size, and other morphological attributes, Carroll's illustrated points within that type. Stephen L. Black, who excavated *La Jita* points at site 41 BX 228 in Bexar County, concurs in this assessment, as does Thomas C. Kelly, who has published *La Jita* points from Kendall and Bexar Counties (Kelly and Hester 1976; Gerstle, Kelly, and Assad 1978).

Carroll is to be commended for publishing his data from Bandera County on this particular point type. However, since the *La Jita* type designation has published precedence, points attributed to his "Medina" classification must be included within the *La Jita* category. It is of great interest that he has so many of these specimens from his site on Winans Creek, and it is to be hoped that he will publish the data on all the specimens (not just 10; Carroll 1983:29) so that a better set of quantitative data will be available for the *La Jita* type. Indeed, since only a handful of specimens have been found at most sites (41 UV 21; 41 BX 228; 41 KE 49; Camp Bullis, Bexar County), I have often wondered if *La Jita* points might not be a distinctive type, but rather an unfinished stage in the manufacture of *Nolan* points (Black and McGraw ms.). The data that Carroll has from Winans Creek might go a long way toward validating this typological construct.

This present situation, regarding "Medina" and *La Jita* points, brings to mind Krieger's admonition (in Suhm, Krieger, and Jelks 1954:8) about the definition of point types: "It is very difficult to get rid of superfluous names for the same artifact after they have been recorded in print. . . ." The fact that so many projectile point type names have been inflicted on the Texas archaeological community requires each of us to carefully consider the publication of new type names. I have been as guilty of "typological proliferation" as anyone, and so I am not singling out Carroll (1983) for specific criticism in this regard. When a group of points is recognized as not fitting a known type, a full literature search should be made and contacts should be initiated with professional and avocational colleagues working in the region. This would help to insure that duplication of typological definitions does not take place. Had Carroll contacted me, Steve Black, or Tom Kelly, we could have noted that "Medina" points had been previously published as *La Jita* and that a very useful contribution to the study of this type could be made by presenting the vast amount of data he has obtained from his Winans Creek site. Such data would have greatly improved the initial type description for *La Jita*.

It might be wise for the Southern Texas Archaeological Association to consider the formation of a "typology review committee" in order to assist the Association's members in the effort to identify previously published point types. This would also

free the editor of *La Tierra*, whoever he or she might be, from having to make decisions on the publication of proposed new types. The Texas archaeological literature is rife with point types--some good, some bad, and some absolutely awful. It is difficult for professionals, and probably impossible for many avocational archaeologists, to keep up with all of the changing evaluations of the utility of some of these types.

In summary, what I believe Carroll (1983) has done is to add to the body of data on the *La Jita* type. For this, he is to be thanked, as some of the rest of us have been lax in providing better descriptions or illustrations of this type. I would argue, however, that the "Medina" term must be disregarded, since the points clearly fall within the previously-published *La Jita* type. Finally, it should be noted that *La Jita* points are likely of Early Archaic date. In 1971, I had suggested that they were "probably Middle Archaic," although at La Jita, specimens were found in both Middle and Early Archaic deposits. Since that time, Black and McGraw (ms.) have found them in Early Archaic (Clear Fork phase) contexts at 41 BX 228; and Kelly (personal communication; Kelly and Hester 1976) considers them to be of equivalent date at 41 KE 49.

References

- Black, S. L. and A. J. McGraw
ms. The Panther Springs Creek Site: Cultural Change and Continuity Within the Upper Salado Creek Drainage, South Central Texas. Manuscript to be published by the Center for Archaeological Research, the University of Texas at San Antonio.
- Carroll, W. B.
1983 The Medina Point: A New Dart Point Type. *La Tierra* 10(1):29-31.
- Gerstle, A., T. Kelly, and C. Assad
1978 The Fort Sam Houston Project: An Archaeological and Historical Assessment. *Center for Archaeological Research, The University of Texas at San Antonio, Archaeological Survey Report* 40.
- Hester, T. R.
1971 Archeological Investigations at the La Jita Site, Uvalde County, Texas. *Bulletin of the Texas Archeological Society* 42:51-148.
- Kelly, T. C. and T. R. Hester
1976 Archaeological Investigations at Sites in the Upper Cibolo Creek Watershed, Central Texas. *Center for Archaeological Research, The University of Texas at San Antonio, Archaeological Survey Report* 17.
- Suhm, D. A., A. D. Krieger and E. B. Jelks
1954 An Introductory Handbook of Texas Archeology. *Bulletin of the Texas Archeological Society* 25 (whole volume).

COMMITTEES AND POINT TYPE CLASSIFICATION: A REPLY TO HESTER

William B. Carroll

It has been suggested that the time may be opportune for the formation of a committee for the purpose of supervision of point type classification, primarily to limit or prevent proliferation of names.

Having served on national committees of another branch of science, and having chaired one such committee for three years during a period of rewrite and revision of the society's "Recommended Standard Practice," many things come to mind. An "ad hoc" committee, per se, has many vagaries, is all too often stacked toward one point of view, and can seriously damage the credibility of a society. On the other hand, a standing committee, constituted for a specific phase of activity, representative of, and responsive to the community it serves, can perform a very valuable service.

Perhaps it is time that standards be established and guidelines set for point type classification. Pottery, of course, should be included, and possibly other artifact types which are classifiable or standardizable. Such a standard should be clearly stated, and uniformly applied throughout the community. The words "tentative" and "provisional" should be carefully considered. All too often the later is clearly translatable as "Know I do not have sufficient scientific data to justify or substantiate the conclusion to which I am about to jump, but I am going to jump anyway--before someone else does!"

We have had in our hands for almost thirty years what in the minds of many of us constituted such a recommended practice. This is probably the most quoted and the finest work to come out of Texas archaeology to date. I am referring to the 1954 TAS Bulletin. An item of prime consideration in the handling of any scientific test is the proposition of adequate or legitimate sampling of data. Alex Krieger was well aware of this when he made the statements recorded on Page 6. These have well withstood the test of time, and it is only those looking for a shortcut who have abrogated them. Concession can perhaps be made to the term "provisional" provided, all other things equal, only sampling is slightly reduced, and the same test of time applied. One thing for certain, one must read the writing as well as look at the pictures.

EDITORIAL COMMENT: HESTER VERSUS CARROLL

Since Hester has interjected *La Tierra* and its Editor into his disagreement with Carroll over the "Medina" versus the "La Jita" projectile point name, I feel obliged to comment. I strongly disagree with both Hester and Carroll on the issue of a Type Review Committee, whether for STAA (as suggested by Hester) or TAS (a la Carroll). Such a committee would be a bureaucratic nightmare, would be powerless to enforce its edicts, and would probably compound rather than solve the problem. For an editor, the need to submit articles naming new types to a regional or state board would only further complicate what can sometimes be an already difficult job. Personally, I would find such a procedure both offensive and unnecessary. If I do not properly perform my office as an editor, then I should be replaced. But don't saddle me with a form of archaeological censorship!

In most sciences, and particularly in archaeology, the true test of a new type name (or any other construct) is peer acceptance and usage. If a name or idea is a good one, others will make use of it and, over time, it becomes the standard practice. If an idea is not used by others, it dies; everybody will ignore it and press on with other work. Thus, the archaeological community as a whole is involved in judging the ultimate fate of new ideas and type names. This is the normal scientific procedure.

I would make a counter proposal to Hester and Carroll. It's time we reviewed and revalidated our criteria of what makes a new "type." I propose the establishment of an ad hoc committee in TAS to develop a set of criteria for types and to publish recommended guidelines on the minimum types of data which should be published for new types. Such a committee could invite comment from all segments of the archaeological community and perhaps host a symposium at state or regional meetings to present their proposed guidelines and listen to suggestions from the public. In my mind, this approach would yield superior benefits; it would produce some specific guidelines for researchers, authors, and editors to use, without setting up an unworkable and impotent bureaucratic machine!

The Editor

CUT MUSSEL VALVE FROM 41 MC 320,
THE NICHOLS I SITE, MCMULLEN COUNTY, TEXAS

Curtis Dusek

ABSTRACT

A modified freshwater mussel shell was recovered from the Nichols I site of McMullen County, southern Texas. A rectangular section of the shell had been removed using a "groove and snap" technique.

INTRODUCTION

A freshwater mussel valve with a small rectangular section cut from near the center of the shell was recovered from the site of 41 MC 320 in McMullen County (Figure 1). The mussel valve was found by Johnny Nichols after he observed it eroding from the cutbank of a small gravel quarry which lies along the southeastern edge of the site. Depth of the mussel was noted as being about four inches below the present ground surface (J. Nichols, personal communication).

I have previously described the site of 41 MC 320 in the April, 1982 edition of *La Tierra* when reporting on an accumulation of prehistoric pottery sherds from the site (Dusek 1982). The site is on the Nichols Ranch, and lies slightly over eight miles south of Tilden. Situated atop the southern end of a low north-to-south oriented ridge, the site overlooks the floodplain of the Nueces River to the south. Elevation of the site ranges between 220 and 250 feet above sea level. The present channel of the Nueces River comes no closer than about 1.2 miles to the southeast of the site. The floodplain of the Nueces River in this area is very broad and flat, with numerous cutoff channels lying between the site and the present channel of the river. Many of these could possibly be the remnants of old abandoned river channels, and if so, the river may have come nearer to the site at one time. The recovery of *Scallorn* points, pottery, and an *Ensor* point from the site itself would seem to indicate a Late Archaic to Late Prehistoric habitation of the site.

SHELL SPECIMEN

The freshwater mussel shell recovered from 41 MC 320 is illustrated in Figure 2. Being unfamiliar with the various species of freshwater mussels which inhabit the Nueces River, I will not attempt to identify the exact species of mussel from which the altered valve comes. The remains of the shell, however, appear to

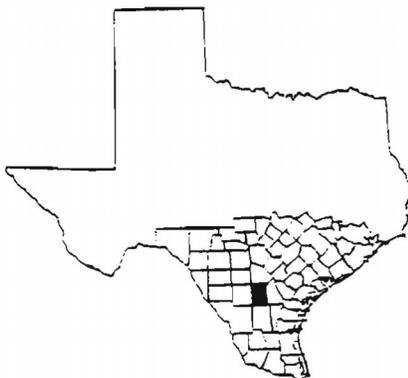


Figure 1. Map of Texas showing McMullen County (darkened area).

represent a variety of mussel with a somewhat elongated shell, the hinge being offset toward one end of the shell. The shell itself is approximately 8.5 cm in length. The lower portion of the shell is missing making an exact measurement of width impossible. However, judging from the curvature of what remains of the lower portion, a maximum width of about 4 cm can be assumed.

The hole left by the removal of the small section near the center of the shell measures approximately 12 mm in length, by 8 mm to 11 mm in width. Cut grooves are clearly visible along three sides of the hole. One, approximately 27 mm in length, is parallel to the long axis of the shell along the upper part of the hole. The other two, each approximately 15 mm in length, are parallel to the short axis of the shell along either side of the hole. No cut mark is visible along the lower edge of the hole, making it appear that removal of this section consisted of snapping it out after the previous cuts were made. Another cut groove approximately 18 mm in length is present slightly below and to the right of the hole. No other obvious modifications to the shell are apparent. A small amount of chipping along the edge of the shell opposite the hinge end is present; this could, however, be the result of natural processes.

DISCUSSION

This find is unique. I am unaware of any other mussel valve modified in such a manner having been found in this area. Possible intentional shaping of five mussel shell fragments was noted in the Choke Canyon area at the site of 41 LK 67. These consisted of small fragments snapped from along the marginal portion of the valve, with the margin itself forming one edge. No conclusive evidence of grooving before snapping was noted. It was suggested that these may represent blanks used in the manufacture of small pendants (Brown, Potter, Hall and Black 1982).

Due to the mussel valve being relatively unaltered in any manner other than the removal of the small section near the center, it is my opinion that the removed section was the intended end product, the remainder of the shell being discarded after this was completed. The other cut mark, below and to the right of the hole, may represent an attempt at the removal of another section of the shell. The removed section of the shell could have been used as a blank for a pendant, a small tool, or possibly as a gaming piece.

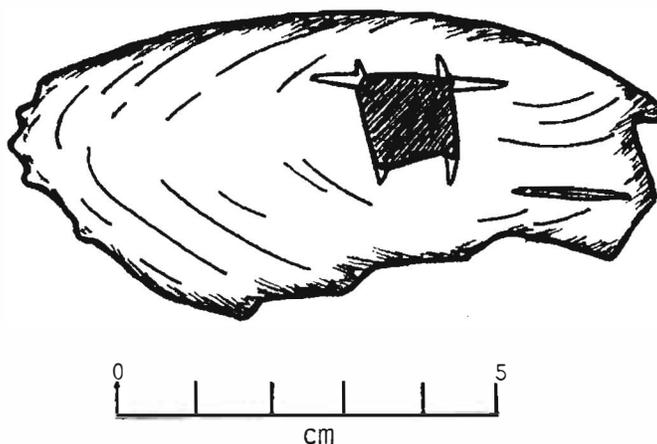


Figure 2. Cut Mussel Valve from the Nichols I Site, 41 MC 320, McMullen County, southern Texas. (Drawing by the author.)

References

- Brown, Kenneth M., Daniel Potter, Grant Hall and Stephen L. Black
1982 Excavations at 41 LK 67 A Prehistoric Site in the Choke Canyon Reservoir, South Texas. *Center for Archaeological Research, The University of Texas at San Antonio, Choke Canyon Series: Vol. 7.*
- Dusek, Curtis
1982 A Pottery Vessel from 41 MC 320, the Nichols I Site, McMullen County, Texas. *La Tierra* 9(2):40-42.

Call for Nominations for the 1983

ROBERT F. HEIZER AWARD

The annual Robert F. Heizer Award for outstanding contributions to Southern Texas Archaeology will be awarded by the STAA at its quarterly meeting in January, 1984. The award is presented annually to recognize the individual (or group) which has made the most outstanding contributions to the archaeology of Southern Texas. Prior honorees include Edward R. Mokry, Jr. (Corpus Christi), Dr. T. R. Hester (UTSA), Shirley Van der Veer (San Antonio) and the Blue Bayou Committee (Victoria).

All STAA members are invited to submit nominations for the 1983 Award; please submit your nomination to the Heizer Award Committee (those who have previously received the award) or to any STAA officer.

AUTHORS

WILLIAM CARROLL of Houston, Texas is a graduate of Texas A&M University who has long shared an interest in archaeology with his life-long friend, Dr. Fred Wendorf. Mr. Carroll has previously published two articles in this journal; in this issue, he responds to Hester's critique of his most recent article.

CHARLES K. CHANDLER is a railroad engineering consultant who lives in San Antonio. He is a very active member of both the STAA and the TAS; he currently serves as Secretary-Treasurer of the state society. C. K. continues his series of articles on the archaeology of the Coastal Bend area of the Texas Gulf Coast.

CURTIS DUSEK graduated from the University of Texas at Austin in 1977 with a B.A. in archaeology and worked for two years with the UTSA Center for Archaeological Research on various projects in western and southern Texas (including Choke Canyon, 41 BX 228, 41 BX 1, and others). He is currently employed as a computer programmer with Bexar County and remains active in South Texas archaeology. Curtis lives in San Antonio.

THOMAS R. HESTER is well known to most readers; a native South Texan, Tom earned his B.A. and M.A. at the University of Texas at Austin and his PhD. from the University of California at Berkeley. He is a professor of anthropology at the University of Texas at San Antonio, and founder of both the STAA and the UTSA Center for Archaeological Research. He is currently the editor of *Lithic Technology*.

THOMAS C. KELLY is a retired Air Force Colonel, former Chairman of STAA, and a student who is currently completing research for his Master's in Anthropology with UTSA. Kelly has been involved in archaeological field work in Texas, New Mexico, England, and Colha in Belize. He has published extensively in the *Bulletin of the Texas Archeological Society*, *UTSA-CAR Research* series, and in this journal. His current article continues the very significant quantitative attribute analysis of Paleo-Indian material which is a major step forward in archaeological typology.

ELTON R. PREWITT recently completed his M.A. in anthropology with the University of Texas at Austin while operating (with his wife, Kerza) a full-time contract archaeological consulting firm. He is president of the Council of Texas Archeologists (CTA), treasurer of the Texas Archeology Defense Fund, and the field director for the three-year archaeological research project at Rowe Valley (TAS summer field school program). In this issue, he presents the first of a series of articles on unpublicized artifact types of Central and South Texas.

SHIRLEY VAN DER VEER is a member of the Texas Archeological Society office staff and field director for the STAA continuing research project at the Dan Baker site (41 CM 104), as well as production editor of this journal. In 1982, she received the annual Robert F. Heizer award for contributions to South Texas Archaeology, in part for continuing field and laboratory work on the Baker Site project. Shirley has also coauthored a presentation on the Baker Site project for the annual TAS convention in Dallas this coming November.

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

S T A A OFFICERS & STAFF - 1983

CHAIRMAN	- Malcom Johnson (Fredericksburg)	<u>STAA Newsletter</u>
		Editor - Evelyn Lewis (San Antonio)
VICE-CHAIRMAN	- Fred Valdez (San Antonio)	<u>Discovery Committee</u>
		Chairman - Courtenay Jones (S.A.)
SECRETARY	- Roger H. Hemion (San Antonio)	<u>Documentation Committee</u>
		Chairman - Paul Ward (San Antonio)
TREASURER	- Shirley Van der Veer (S.A.)	<u>Educational Programs</u>
		Chairman - Shirley Mock (San Antonio)
<i>LA TIERRA</i>		<u>Hospitality Committee</u>
		Chairman - Judy Crouse (Helotes)
Editor - Jim Mitchell (Converse)		<u>Mailing Committee</u>
Production - Shirley Van der Veer (S.A.)		Chairman - Barney Haegelin (S.A.)
Staff Artist - Richard McReynolds (S.A.)		<u>Membership Committee</u>
Area Consultants:		Chairman - Liz Smith (San Antonio)
Tom Beasley (Beeville)		<u>Program Committee</u>
		Chairman - Al McGraw (Cibolo)
Bill Birmingham (Victoria)		<u>Publicity Committee</u>
		Chairman - Wilson McKinney (S.A.)
Rita Gunter (Corpus Christi)		<u>Registration Committee</u>
		Chairman - Lynn Highley (San Antonio)
T. C. Hill, Jr. (Crystal City)		<u>Social Committee</u>
		Chairman - Steve Black (San Antonio)
Malcom Johnson (Fredericksburg)		<u>Telephone Committee</u>
		Chairman - Rita Neureuther (S.A.)
Tom Kelly (San Antonio)		<u>Field Directors</u>
		Anne Fox (San Antonio)
Ed Mokry (Corpus Christi)		Smitty Schmiedlin (Victoria)
		Shirley Van der Veer (San Antonio)
Wayne Parker (Ralls)		
		<u>STAA Library</u>
Lee Patterson (Houston)		
		Housed in Archaeology Laboratory on
Smitty Schmiedlin (Victoria)		UTSA campus (see Table of Contents)