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Cover Illustration: The cover illustration is of *Tortugas*, *Desmuke* and *Matamoros* dart points, typical south Texas points. Drawings by Margie Greco, from the article by Michael Woerner and Lynn Highley in 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 (512-691-4462).

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THE ROBERT F. HEIZER AWARD FOR 1982

The Southern Texas Archaeological Association's Robert F. Heizer Award is given on an annual basis and recognizes major contributions to archaeology, especially those contributions involving the interaction of professional and amateur archaeologists. The past three awards have been presented to individuals. However, this year the Heizer Award Committee has chosen to recognize a group of individuals for what we believe to be a remarkable set of accomplishments during 1982. This group, known as the "Blue Bayou Committee" of Victoria, Texas, has successfully carried out the following major tasks:

- 1) They have recorded and documented an important Late Prehistoric cemetery site, known as Blue Bayou (41 VT 94) on the property of the DuPont Company near Victoria;
- 2) They invited other avocational and several professional archaeologists to visit the site and to help provide an initial assessment of its importance and strategies to be followed in its investigation;
- 3) The Committee then constituted itself as a fund-raising unit, and, through a community effort in the Victoria region, they were able to obtain more than \$10,000 for scientific studies at the site;
- With their lengthy planning efforts and following their success at raising monies for intensive research, they have begun a site characterization study that involves a collaborative and cooperative effort between professional and avocational archaeologists.

Indeed, the Heizer Award Committee considers the work of the Blue Bayou Committee to be nothing short of remarkable, in that the community — in this case, the Victoria area — has become directly involved with, and supportive of, an archaeological project. The Blue Bayou Committee has also endeavored, with the help of the *Victoria Advocate* daily newspaper, to provide full and accurate press coverage of the work at site 41 VT 94. We find this to also be of highest importance, since such coverage provides the laymen of the Victoria region and beyond with a realistic view of an archaeological investigation.

Thus, for its significant achievements in avocational and professional collaboration and in community involvement — both of which we feel can serve as a model to other archaeologists in the state — the 1982 Robert F. Heizer Award is presented to the Blue Bayou Committee. The members of the Committee are:

Will Armstrong, Chairman James V. Woodrick William W. Birmingham Don Will Edward A. Vogt, Jr. Chris Buys Kay McHaney Sonny Timme

The Heizer Award Committee would further like to commend the DuPont Company and the management of its Victoria plant, as well as the staff of the Victoria Advocate, for their cooperation in the activities at the Blue Bayou site, and we commend also the many volunteer participants.

Heizer Award Committee, 1982 Thomas R. Hester, Chairman Edward R. Mokry, Jr. Shirley M. Van der Veer

ENTERING YEAR TEN

With the last issue, we concluded the ninth volume of *La Tierra*. It was an interesting and exciting year for Texas Archaeology - Rowe Valley in June, continuing work at the Baker Site, surveying in Kendall County, BBQ-ing in the fall, the TAS meeting in late October. Some very significant work has been done this last year including the work by the Victoria Group at the Blue Bayou and by the Texas Highway Department near Round Rock in Central Texas.

With this issue, we will begin our tenth year as an organization. My goodness! Where did those nine years go? In many ways, it seems as if we have barely just begun.

STAA has done a number of significant things since our first meeting in December 1973. At the same time, there are many things which remain to be done. We should use this next year wisely, so that we can end our first decade having accomplished at least some of the things we set out to do.

Early in 1983, STAA published a field manual, ably edited by Roger Hemion (see advertisement elsewhere in this issue). Over a year in preparation, this manual becomes our second STAA Special Publication. Hopefully, it will be used by all our members in their field work. Some 50 copies of the manual have already been sold — to STAA members at the February meeting and to the UTSA Center for Archaeological Research, for use by their students and researchers during the spring season of work at Colha in Belize!

There are many other things we also need to get done in 1983, including additional special publications, more field work, and completing reports of work which STAA has sponsored in recent years. In addition, we need to actively build up our membership, to get more members involved in various of our committees and projects, and to better service the needs of all our membership. If you have any critiques, ideas, or suggestions, please let them be known to any member of the board.

Hopefully, at the end of this coming year, we will be able to look back with pride on what we have been able to accomplish — in 1983 and in the last ten years.

The Editor

THE BROMLEY F. COOPER COLLECTION OF PRE-ARCHAIC AND ARCHAIC DART POINTS FROM MCMULLEN COUNTY

Michael C. Woerner and Lynn Highley

INTRODUCTION

In 1978 Bromley Cooper of Kingsville, Texas Ioaned his McMullen County collection of prehistoric artifacts to the Southern Texas Archaeological Association for documentation. The collection represented ten years of surface collecting in the central portion of western McMullen County (see Figure 1). Parts of this collection have been published in past issues of La Tierra. Hemion (1980 a, b) has reported on the arrow points and notched ground stone artifacts, while Jones (1981) has analyzed the modified sandstone specimens. The Paleo-Indian points will be discussed in a future issue of La Tierra. This report provides a descriptive analysis of the dart points attributable to the Pre-Archaic and Archaic periods of south Texas prehistory.

Recent surveys and excavations in the Choke Canyon Reservoir region of McMullen and Live Oak Couties have greatly increased our understanding of the prehistory of this part of Texas. The following sources should be consulted for information regarding ecological, ethnohistorical and cultural background studies: Lynn, Fox and O'Malley 1977; Campbell and Campbell 1981; Thoms, Montgomery and Portnoy 1981; and Hall, Black and Graves 1982.

ANALYSIS

A total of 926 points were identified and sorted into established point types based primarily on Suhm and Jelks (1962). Other references consulted are included with each type description. Unclassifiable points were grouped into miscellaneous point type categories according to similar morphological characteristics. With such a large collection of points it was often a frustrating task to categorize each and every point. Opinions were sought from many persons including Tom Hester, Bob Stiba, Fred Valdez, Grant Hall and Steve Black.

Dart point descriptions and discussions are presented in alphabetical order. The discussion of each type includes the total number of specimens per type, descriptive information, measurements, types of raw material (followed by number of specimens

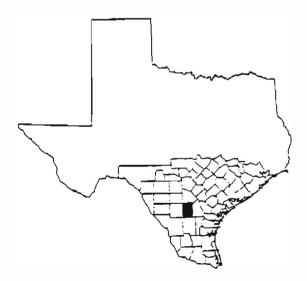


Figure 1. Texas map showing McMullen County (darkened area).

per rock type) and the distribution and chronological placement of each type. Figure IV-4 in Hemion's recently published <code>Handbook</code> provides a visual display of the terminology used to describe the points (Hemion 1983:42). Measurements were taken of the smallest and largest points for each type. Dimensions are in millimeters, and weights are in grams. Measurements and weights of incomplete specimens are enclosed in parentheses; however, if a measurement was too incomplete to provide meaningful data, it was omitted.

Information regarding time frames and distributional data is stated in general terms. Included is a series of references from south and central Texas for the reader to consult for additional information. The list is not meant to be inclusive and usually represents only a sample of available sources.

A drawing is provided with each description of established point types. Each drawing represents the typical point form described. Often a range of charact-teristics is described, and Suhm and Jelks (1962) should be consulted for the varieties encountered in each point type. Drawings are also provided for "Miscellaneous Type 1"; other miscellaneous groups are not illustrated. Most of the drawings were done by Margie Greco of the Center for Archaeological Research, The University of Texas at San Antonio. The Bell, Lerma-like and eccentrics were drawn by Richard McReynolds.

Abasolo: 49 specimens

Description: These triangular to leaf-shaped specimens have straight to convex lateral edges and convex bases. One-half of the specimens have beveled lateral edges.

	Minimum	Maximum
Length	44.3	59.6
Blade Width	27.5	36.3
Thickness	8.2	8.8
Weight	9.2	16.4



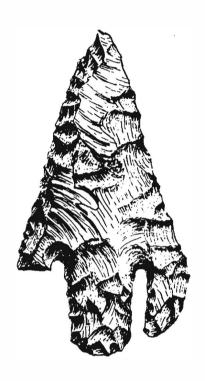
Raw Material: Chert (47), chalcedony (1), silicified wood (1)

Chronological Placement/Distribution: Archaic; found throughout south Texas (Weir 1956:65; Suhm and Jelks 1962:165; Hester, White and White 1969:135; Beasley 1982:35).

Bell: 1 specimen

<u>Description</u>: This dart point type is distinguished by large prominent barbs created by notches cut in from the base. The parallel-edged, thinned stem has a convex basal edge. The lateral edges have been alternately beveled along the left side of both faces. One face has been heavily patinated; the beveling has removed the patina indicating that the point was reworked after patination.

Length	85.0
Blade Width	(45.0)
Thickness	7.0
Stem Length	25.0
Stem Width	18.0
Neck Width	18.0
Weight	(25.0)



Raw Material: Chert

Chronological Placement/Distribution: Pre-Archaic; south Texas (Fox and Hester 1976: 62-63; Hall, Black and Graves 1982:286); central Texas (Sorrow, Shafer and Ross 1967: 12; Sollberger and Hester 1972:339; Wesolowsky, Hester and Brown 1976:45); eastern Llano Estacado (Parker and Mitchell 1979:26-27; similar to points in west Texas (Johnson 1964:Fig. 11, o,p,s; Prewitt 1966:Fig. 4, E-H,J,N); similar to Charcos points in southwestern Coahuila (Heartfield 1975:136-137,140); similar to Calf Creek points in eastern Oklahoma, northwestern Arkansas, and southern Missouri (Perino 1968:14). See also McKinney (1981) for a survey of Bell distribution in southern Texas.

Bulverde: 13 specimens

<u>Description</u>: The triangular blades have straight to slightly convex sides. Two specimens have rounded, reworked tips. Shoulders are generally squared, although two specimens have weak, rounded shoulders and two others have sharp barbs. The stems are rectangular to slightly contracting with slightly concave bases. Only one specimen lacks a stem longitudinally thinned on one or both faces.

	Minimum	Maximum
Length	48.6	75.8
Blade Width	22.9	29.3
Thickness	7.6	10.4
Stem Length	9.4	18.2
Stem Width	16.2	19.8
Neck Width	16.8	23.0
Weight	7.7	17.0



Raw Material: Chert (13)

Chronological Placement/Distribution: Early Archaic central Texas point form not commonly found in south Texas (Hester 1980:98); LaSalle County in south Texas (Hester, White and White 1969:135); south Texas (Creel et al.1979:23; Hall, Black and Graves 1982:282); central Texas occurrences include Canyon Reservoir (Johnson, Suhm and Tunnell 1962:19,21,58,87-88) and Stillhouse Hollow Reservoir (Sorrow, Shafer and Ross 1967:14-17, 73-77); Bexar County (Black and McGraw 1982).

Carrizo: 3 specimens

<u>Description</u>: The two large stemless specimens have convex lateral edges. The most distinguishing characteristic is the deep basal notch which gives the form a heart-shaped outline. A jasper specimen appears to be heat treated.

	Minimum	Maximum
Length	(44.8)	56.2
Blade Width	29.0	32.7
Thickness	7.4	8.0
Weight	9.5	12.8



Raw Material: Chert (2), jasper (1)

<u>Chronological Placement/Distribution</u>: Archaic point form; Hester (1980:98) states that *Carrizo* points are primarily found in Dimmit, Zavala, LaSalle and Frio Counties.

Catan: 76 specimens

<u>Description</u>: These triangular to leaf-shaped specimens have straight to semicircular bases. The bases are well-thinned, apparently to facilitate hafting. Almost half the specimens have alternate left edge beveling. Thirteen specimens have been heat-treated. The larger specimens overlap with the Abasolo point type.

	Minimum	Maximum
Length	25.4	46.0
Blade Width	15.1	22.5
Thickness	4.6	9.8
Weight	2.3	7.8



Raw Material: Chert (67), chalcedony (1), white quartzite (3), coarse grained black quartzite (1), silicified wood (4)

<u>Chronological Placement/Distribution</u>: Archaic to Late Prehistoric; south Texas form (Weir 1956:65; Hester 1980:98); also Beasley (1982:35).

Darl: 38 specimens

Description: The blades are long, slender triangles with straight to slightly convex edges. The shoulders vary from non-existent to prominent. Stems vary from parallel-edged to expanding. The majority of the points have concave basal edges; six specimens have straight bases. Impact fractures are obvious on two points.

	<u>Minimum</u>	Maximum
Length Blade Width	38.4 20.0	69.5 21.8
Thickness	6.9	9.4
Stem Length	6.3	17.0
Stem Width	15.0	17.3
Neck Width	4.9	18.5
Weight	5.2	13.0



Raw Material: Chert (38)

Chronological Placement/Distribution: Late Archaic; south Texas (Hall, Black and Graves 1982:290; Beasley 1982:35); central Texas (Sorrow, Shafer and Ross 1967:61-64; Prewitt 1974:15, 24.

Desmuke: 119 specimens

<u>Description</u>: <u>Desmuke</u> points are large and slender to small, shoulderless, lozonge-shaped points. Lateral edges are straight to slightly convex. Twenty-two points have been beveled on alternate edges; six specimens have serrated lateral edges. Basal edges are most commonly rounded to semicircular although some basal edges converge to a point. Twelve points have been heat-treated and two others have been severely fire-fractured.

	Minimum	Maximum	
Length	30.8	57.8	
Blade Width	18.6	21.0	
Thickness	7.2	8.2	
Weight	3.1	8.4	
weight	3.1	0.4	

<u>Raw Material</u>: Chert (102), silicified wood (7), chalcedony (1), jasper (1), gray siliceous quartzite (1), white quartzite (7).

Chronological Placement/Distribution: Archaic, south Texas (Weir 1956:65; Hester 1980:98; Beasley 1982:35).

"Early Corner-Notched": 7 specimens

<u>Description</u>: The blades have straight or slightly convex lateral edges. One patinated specimen is prominently shouldered; one has serrated lateral edges, a well-rounded, reworked tip and small barbs. This specimen (illustrated) was reworked after patination. Another specimen is heavily patinated on both faces and is missing the distal tip. Two specimens are predominantly proximal fragments. The final specimen has been heat-treated and exhibits an impact fracture. The expanding stems are the result of wide corner notches. Basal edges are straight, concave and convex.

	Minimum	Maximum
Length	(30.3)	45.0
Blade Width	20.3	22.6
Thickness	6.7	7.5
Stem Length	10.0	13.5
Stem Width	16.6	16.9
Neck Width	11.5	16.0
Weight	(5.1)	7.9



Raw Material: Chert (7)

(NOTE: Blade has been reworked)

Chronological Placement/Distribution: Hester (1980:98) refers to these points as a series, not a type, and includes corner-notched points attributed to the Pre-Archaic period. Although uncommon in south Texas, they have been found in Zavala County and along the Edwards Plateau (ibid.; Hester 1971:71-72; Gerstle, Kelly and Assad 1978: 82-83).

Edgewood: 13 specimens

<u>Description</u>: The blades have generally straight lateral edges; shoulders are prominent to well-barbed. Stems are short but widely expanding, often as wide as the blade. Basal edges are generally straight.

	<u>Minimum</u>	Maximum
Length	30.0	38.0
Blade Width	16.2	26.2
Thickness	5.8	6.9
Stem Length	6.7	9.6
Stem Width	16.7	17.0
Neck Width	11.7	13.0
Weight	2.5	5.0



Raw Material: Chert (13)

Chronological Placement/Distribution: Late Archaic (Hester 1980:101); south Texas (Hall, Black and Graves 1982:290; Beasley 1982:35).

Ensor I: 25 specimens

<u>Description</u>: The predominantly side-notched points usually have straight to slightly convex lateral edges. The shoulders are rounded and weak. Stems are widely expanding, often as wide as the blade. *Ensor* I differs from *Ensor* II and III in that it has a concave base whose concavity ranges from mild to very pronounced. One specimen has been heat-treated; two have impact fractures.

	Minimum	Maximum
Length	31.2	42.8
Blade Width	19.6	22.2
Thickness	6.3	6.8
Stem Length	11.4	12.0
Stem Width	22.7	23.3
Neck Width	16.8	18.5
Weight	2.5	6.9



Raw Material: Chert (23), chalcedony (1), coarse-grained quartite (1)

Chronological Placement/Distribution: Late Archaic common to south Texas (Johnson, Suhm and Tunnell 1962:21, 88-90; Hester 1971:73-74; Highley *et al.* 1978:156-158; Hester 1980:101; Hall, Black and Graves 1982:289; Beasley 1982:35).

Ensor II: 27 specimens

<u>Description</u>: These side-notched points have triangular blades that are relatively slender although some smaller specimens have short, broad triangular blades. Edges are straight to slightly convex. Two specimens have serrated edges; five others have beveled edges. The stems are widely expanding with bases as wide or wider than the blade. *Ensor* II is characterized by convex bases.

	Minimum	Maximum
Length	29.3	57.4
Blade Width	19.8	20.8
Thickness	6.2	10.0
Stem Length	7.0	10.0
Stem Width	(18.0)	19.5
Neck Width	8.3	13.5
Weight	3.7	6.1



Raw Material: Chert (22), silicified wood (1), white quartzite (1), coarse-grained
black quartzite (1), chalcedony (2)

Chronological Placement/Distribution: see Ensor I

Ensor III: 25 specimens

<u>Description</u>: The blades of these side-notched points are predominantly long and narrow although some smaller specimens have short, wide blades. Lateral edges are straight to convex; one specimen has dulled lateral edges. The stems are widely expanding; only two specimens have bases narrower than the blades. The *Ensor* III characteristic is a straight basal edge. The distal tips, when present, are extremely sharp. Two specimens have been heat-treated.

	Minimum	Maximum
Length	31.2	61.5
Blade Width	19.8	23.0
Thickness	6.2	8.9
Stem Length	6.0	9.0
Stem Width	19.1	20.6
Neck Width	16.1	17.0
Weight	3.5	10.4



Raw Material: Chert (24), chalcedony (1)

Chronological Placement/Distribution: See Ensor I

Fairland: 20 specimens

<u>Description</u>: The large triangular blades are generally crude and asymmetrical. Lateral edges are straight to slightly convex; five points are beveled on alternate edges. Shoulders range from moderate to non-existent. Wide, shallow side notches result in a widely expanding stem. Bases are often wider than the blade and the basal edges are straight to concave.

	Minimum	Maximum
Length	(28.8)	55.7
Blade Width	15.2	21.7
Thickness	5.9	8.8
Stem Length	10.0	21.0
Stem Width	20.4	24.8
Neck Width	13.0	17.4
Weight	3.0	10.7



Raw Material: Chert (18), chalcedony (2)

Chronological Placement/Distribution: Late Archaic in south Texas (Hester 1980:101; Hall, Black and Graves 1982:289-290); central Texas (Sorrow, Shafer and Ross 1967:61; Prewitt 1974:32).

Frio: 20 specimens

Description: Specimens have broad, triangular blades with straight to convex edges; two points have slightly concave edges. Strong, prominent shoulders are most common; only two specimens still retain barbs. The widely expanding stems are formed by corner notches or side notches angled towards the distal end. All points have strongly concave bases; four have basal notches. Seven points exhibit heattreating; one has been split by an impact fracture.

	Minimum	Maximum
Length	33. 5	50.0
Blade Width	19.0	(22.0)
Thickness	6.2	7.2
Stem Length	7.8	10.0
Stem Width	14.2	(28.0)
Neck Width	14.1	(19.0)
Weight	3.9	(7.5)



Raw Material: Chert (20)

Chronological Placement/Distribution: Late Archaic found throughout south Texas Hester 1980:101; Beasley 1982:35; Hall, Black and Graves 1982:290).

Gower: 6 specimens

<u>Description</u>: Triangular blades vary from long and slender to short and stubby. <u>Lateral</u> edges are straight to slightly convex with weak, rounded shoulders. Four specimens have slightly expanding stems; two have rectangular stems. All specimens have deeply indented basal edges. Three specimens are patinated. Two have been damaged by impact fractures; two others have been heat-treated.

	Minimum	Maximum
Length	39.0	56.0
Blade Width	21.5	23.0
Thickness	6.8	7.8
Stem Length	11.7	13.0
Stem Width	(18.4)	19.0
Neck Width	15.9	17.6
Weight	6.4	7.5



Raw Material: Chert (6)

Chronological Placement/Distribution: Pre-Archaic form uncommon to south Texas (Hester 1980:101); Bexar County (Gerstle, Kelly and Assad 1978:81-82; Black and McGraw 1982); central Texas (Shafer 1963:64-65; Crawford 1965:71-97; Sollberger and Hester 1972:326-344). See also McKinney (1981) for a summary of Gower points in Texas.

Kent: 13 specimens

<u>Description</u>: These crudely made points have blades that are elongated triangles with straight to slightly convex lateral edges. The shoulders are generally weak and rounded. Four specimens are asymmetrical with resulting shoulders being absent on one side but present on the other. The stems, like the blades, are crudely worked and often irregular. Stems range from slightly contracting to expanding. Bases are straight to near semicircular. Three points have been heat-treated.

	Minimum	Maximum
Length	33.7	67.0
Blade Width	16.1	22.8
Thickness	6.4	8.5
Stem Length	6.5	14.0
Stem Width	11.4	14.1
Neck Width	8.3	11.0
Weight	3.5	12.1



Raw Material: Chert (13)

Chronological Placement/Distribution: Late Archaic, central coast into east and central Texas (Suhm and Jelks 1962:199; south Texas (Weir 1956:65).

Lange: 1 specimen

<u>Description</u>: The large triangular blade has straight lateral edges. The shoulders are prominent but without barbs. The stem is slightly expanding with a straight, thinned base. It has been heat-treated.

Length	52.4
Blade Width	28.3
Thickness	7.9
Stem Length	11.7
Stem Width	19.0
Neck Width	7.1
Weight	10.2



Chronological Placement/Distribution: Archaic, ca. 4000 B.C.-A.D. 1000 (Suhm and Jelks 1962:203); south Texas (Weir 1956:65).

Langtry: 39 specimens

<u>Description</u>: The triangular blades have straight to slightly concave lateral edges. All specimens have either prominent shoulders or wide outward flaring barbs. The stems are long and contracting with straight edges. The majority of the points have concave bases, but others have straight or convex basal edges. All specimens are well thinned and finely worked. Approximately half of the points exhibit heat-treating.

	Minimum	Maximum
Length	31.3	(56.0)
Blade Width	(26.8)	(27.8)
Thickness	4.0	6.4
Stem Length	10.0	13.0
Stem Width	9.7	12.6
Neck Width	12.8	13.5
Weight	(2.9)	(7.8)



Raw Material: Chert (39)

Chronological Placement/Distribution: Middle Archaic point common throughout south Texas (Weir 1956:65; Hester 1980:101; Hall, Black and Graves 1982:288).

Lerma: 23 specimens

<u>Description</u>: These slender, double-pointed specimens have convex lateral edges. Several have edges which parallel each other before curving to a point. Typically the base is rounded rather than sharply pointed. Most specimens are rather thick with steeply chipped lateral edges. Four specimens have been heat-treated.

	Minimum	Maximum
Length Blade Width	(40.4) 19.5	72.0 20.1
Thickness	7.5	9.0
Weight	6.3	14.5



Raw Material: Chert (21), silicified wood (2)

Chronological Placement/Distribution: Archaic period in south Texas (Weir 1956:65; Hester 1980:101; Hall, Black and Graves 1982:316).

"Lerma-like": 29 specimens

<u>Description</u>: These small, slender lozenge-shaped points are similar to <u>Lerma</u> but are much smaller. Specimens are generally bipointed with both ends of the lozenge being nearly equal in length. Most points are thick with steeply chipped edges. Three have been heat-treated.

	Minimum	Maximum
Length	35.1	51.5
Blade Width	16.3	17.1
Thickness	7.4	7.6
Weight	3.6	7.2

Raw Material: Chert (20), white quartzite (7), silicified wood (2)

Chronological Placement/Distribution: Archaic (?).

Marcos: 5 specimens

Description: The broad blades have straight to slightly convex edges. All specimens have deep corner notches which produce a widely expanding stem and distinct barbs. Two specimens have concave bases, two others have straight bases and one has a slightly convex base. One heat-treated specimen has a ground basal edge and a reworked distal tip. A second point is heavily patinated on one face and was reworked after patination.

	Minimum	Maximum
Length	(35.2)	53.0
Blade Width	29.9	38.1
Thickness	5.4	8.3
Stem Length	7.8	11.0
Stem Width	20.9	26.4
Neck Width	13.6	18.7
Weight	(4.9)	12.6



Raw Material: Chert (5)

Chronological Placement/Distribution: Late Archaic (Suhm and Jelks 1962:209-210); central Texas (Johnson, Suhm and Tunnell 1962:92).

Martindale: 1 specimen

Description: This point has a triangular blade with convex lateral edges. The rounded distal tip is a result of reworking. The shoulders are well-developed and the stem is widely expanding. The basal edge has a V-shaped concavity. The "fishtail" stem is characteristic of this type of point.

Length	37.8
Blade Width	29.6
Thickness	8.0
Stem Length	14.0
Stem Width	21.2
Neck Width	15.0
Weight	8.4



Raw Material: Chert

(NOTE: Blade has been reworked)

Chronological Placement/Distribution: Archaic, central Texas (Suhm and Jelks 1962: 213).

Matamoros: 78 specimens

<u>Description</u>: The triangular specimens have straight to slightly convex edges; nearly one-half of these are beveled on alternate edges. The basal edges are generally straight. Most bases have been thinned by removing several longitudinal flakes from one or both faces.

	Minimum	Maximum
Length	24.6	43.6
Blade Width	19.8	22.4
Thickness	6.5	7.5
Weight	2.5	7.7



<u>Raw Material</u>: Chert (66), white quartzite (7), silicified wood (3), chalcedony (1), jasper (1).

Chronological Placement/Distribution: Late Archaic to Late Prehistoric form common to south Texas (Weir 1956:65; Hester 1980:101-102); also Beasley (1982:35).

<u>Paisano</u>: 4 specimens

<u>Description</u>: Blades are long and crudely triangular with steeply chipped edges; one specimen has serrated edges. Stems are formed by wide, shallow side notches leaving shoulders weak or non-existent. Stems are straight to slightly expanding. Two specimens have straight bases; the other two have notched bases. One specimen has been heat-treated.

	Minimum	Maximum
Length	40.6	50.3
Blade Width	18.5	18.7
Thickness	7.7	8.7
Stem Length	10.0	14.0
Stem Width	8.4	17.3
Neck Width	16.9	17.3
Weight	6.2	7.8



Raw Material: Chert (3), silicified wood (1)

Chronological Placement/Distribution: Possibly A.D. 800-A.D. 1200, southern part of Trans-Pecos area (Suhm and Jelks 1962:227).

Palmillas: 33 specimens

Description: The long triangular to leaf-shaped blades have shoulders which range from weak and rounded to very distinct. The distinguishing characteristic is the bulbous stem. Four specimens have been heat-treated.

	Minimum	Maximum
Length	36.1	72.3
Blade Width	16.6	32.4
Thickness	5.4	11.6
Stem Length	7.0	24.0
Stem Width	9.1	24.2
Neck Width	10.8	19.1
Weight	2.8	19.4



Raw Material: Chert (23), white quartzite (2), chalcedony (1), silicified wood (5), "sugar" quartzite (2).

Chronological Placement/Distribution: Archaic (Hester 1980:102); occurrences throughout central and southern Texas and into Mexico (Suhm and Jelks 1962:229).

Pandora: 5 specimens

<u>Description</u>: The long triangular to leaf-shaped blades have no shoulders. The ill-defined stems have bases that are straight to gently concave.

	Minimum	Maximum
Length	32.7	66.7
Blade Width	17.3	32.3
Thickness	7.2	9.2
Stem Length	6.5	15.0
Stem Width	14.1	20.2
Neck Width	14.6	21.5
Weight	4.8	13.3



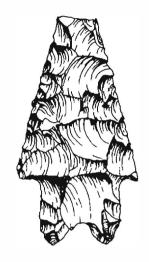
Raw Material: Chert (5)

Chronological Placement/Distribution: Suhm and Jelks (1962:233) place this type at ca. 2000 B.C,-A.D. 1000, "...but may be older or younger"; common to region where central and coastal regions merge (ibid.); in south Texas (Weir 1956:65; Hester, White and White 1969:139).

Pedermales: 19 specimens

<u>Description</u>: Blades are triangular to leaf-shaped. Shoulders are slight to pronounced; four incomplete specimens have small barbs. Stems are generally straight edged with slightly concave to deeply indented basal edges. Two specimens exhibit light patination.

	Minimum	<u>Maximum</u>
Length	47.3	66.5
Blade Width	25.1	30.5
Thickness	6.4	8.1
Stem Length	15.6	18.0
Stem Width	18.7	19.0
Neck Width	17.3	26.1
Weight	9.3	15.4



Raw Material: Chert (19)

Chronological Placement/Distribution: Middle Archaic (1000-2000 B.C.) based on work throughout central Texas (Hester, White and White 1969:139-142; Hall, Black and Graves 1982:282).

Refugio: 54 specimens

Description: The specimens generally have long, slender, triangular to leaf-shaped blades; however, several of the specimens have edges which are parallel before curving inward at the distal end. The chief characteristic is the thick longitudinal ridge on one or both faces produced by steeply chipped edges. The well-thinned bases are convex to semi-circular. Several specimens are smaller than the range specified by Suhm and Jelks (1962:241). Seventeen points have been heat-treated. Hester (1980:102) states that these specimens may be either preforms or knives.

	Minimum	Maximum
Length	39.0	75.8
Blade Width	18.3	22.3
Thickness	7.6	11.2
Weight	6.9	17.8



Raw Material: Chert (47), silicified wood (4), white quartzite (2), black quartzite (1)

Chronological Placement/Distribution: Archaic (?) (Hester 1980:102); south Texas (Weir 1956:65; Hall, Black and Graves 1982:315-316; Beasley 1982:35).

San Patrice: 4 specimens

<u>Description</u>: Specimens have short, stubby triangular blades with straight to slightly convex edges. Stems are formed by small, shallow side notches resulting in shoulders that are weak or non-existent. The lateral edges on both faces appear beveled or steep. The center of the stem and part of the blade is thinned by the removal of a flute-like flake on both faces. All specimens have expanding stems with broadly concave bases. One specimen has dulled basal and stem edges.



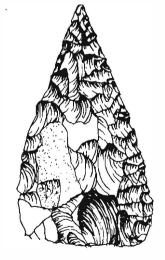
Raw Material: Chert (3), quartzite (1)

Chronological Placement/Distribution: Archaic; northwestern Louisiana, northeastern Texas, eastern Oklahoma (Suhm and Jelks 1962:243); southeastern Texas (Duffield 1963; Moore 1983).

Tortugas 119 specimens

Description: These triangular specimens have straight to convex edges. The lateral edges are frequently alternately beveled. Bases are generally straight or concave. Several specimens do have slightly convex basal edges. Specimens range from relatively short and broad to long, narrow based points.

	Minimum	<u>Maximum</u>
Length	37.6	62.9
Blade Width	25.1	35.5
Thickness	7.3	7.8
Weight	7.5	15.3



Raw Material: Chert (106), white quartzite (6), "sugar" quartzite (1), silicified wood (2), fine-grained quartzite (1), "silt" stone (1), chalcedony (1), unidentified igneous rock (1).

Chronological Placement/Distribution: Middle Archaic (prior to 1300 B.C.) in south Texas (Weir 1956:65; Hester 1980:105; Hall, Black and Graves 1982:298,306; Beasley 1982:35).

Travis: 1 specimen

<u>Description</u>: This specimen has slightly convex lateral edges; the tip has been shaped to a sharp point. The slight shoulders give way to a parallel-edged stem with a convex base.

Length	67.1
Blade Width	24.1
Thickness	8.5
Stem Length	16.7
Stem Width	16.9
Neck Width	19.4
Weight	13.6



Raw Material: Chalcedony

Chronological Placement/Distribution: Archaic; primarily central Texas form (Suhm and Jelks 1962:251).

"Wells-like": 10 specimens

<u>Description</u>: The long, slender triangular blades have straight to slightly convex lateral edges. Shoulders are rounded and weak. The stems are slightly to strongly contracting and are one-fourth to one-third the total length of the point. Bases are almost pointed to semicircular. Wells points usually have ground stem edges; these specimens do not exhibit this characteristic.

	Minimum	<u>Maximum</u>
Length	36.0	57.3
Blade Width	17.0	17.8
Thickness	6.8	8.3
Stem Length	10.0	15.7
Stem Width	9.0	11.3
Neck Width	5.0	6.5
Weight	3.9	7.7



Raw Material: Chert

Chronological Placement/Distribution: Late Archaic; central portion of east Texas extending into central Texas (Suhm and Jelks 1962:257).

"Miscellanéous Type 1": 2 specimens

Description: All other stemmed points have been grouped according to similar stem shapes; these two specimens, however, are grouped together because of the uniqueness of the blades. Both points have a series of notches occurring along or around the blade periphery. One specimen has a triangular blade which has four notches extending down one lateral edge. Only one notch occurs on the opposite side which, coupled with the lower notch on the other side, results in an expanding stem with a straight basal edge. The smaller specimen appears to have seven notches occurring around the periphery of the blade. Portions of the blade protuberances are broken, but the original outline appears to have been symmetrical. The notches that created the parallel-edged stem were cut from the straight basal edge.





	Minimum	Maximum
Length	45.0	54.0
Blade Width	35.0	28.0
Thickness	5.0	7.0
Stem Length	8.0	9.0
Stem Width	10.0	27.0
Neck Width	10.0	19.0
Weight	7.0	8.0

Raw Material: Chert (2)

Distribution/Chronological Placement: Specimens exhibiting unusual notching are often termed "eccentrics." A similar specimen was recently surface-collected in Uvalde County (Al McGraw, personal communication). Published references for south Texas were not located. However, unusual, notched arrow points and dart points are reported from Cueva de la Candelaria in Coahuila, Mexico (Aveleyra, Maldonado-Koerdell, and Martinez del Rio 1956:66.72).

"Miscellaneous Type 2": 16 specimens

<u>Description</u>: All points in this category have contracting stems of varying degrees but do not fit into contracting stem point types such as *Desmuke*, *Langtry* and *Wells*. The two largest points are similar to the *Gary* point type. Most specimens have weak, almost rounded, shoulders. Bases vary from straight to semicircular.

	Minimum	<u>Maximum</u>
Length	36.9	65.5
Blade Width	18.4	29.5
Thickness	6.2	9.0
Stem Length	8.0	18.0
Stem Width	7.6	13.0
Neck Width	10.0	17.4
Weight	3.4	13.4

Raw Material: Chert (16)

"Miscellaneous Type 3": 16 specimens

Description: This category consists of unidentifiable points with rectangular or parallel-edged stems. These points are varied in stem size, overall length, and the presence or absence of shoulders. Stem edges range from straight to convex or concave.

	Minimum	Maximum
Length	33.7	48.6
Blade Width	17.8	30.4
Thickness	7.5	7.0
Stem Length	13.8	13.9
Stem Width	15.2	19.6
Neck Width	15.4	20.9
Weight	4.4	10.4

Raw Material: Chert (16)

"Miscellaneous Type 4": 5 specimens

<u>Description</u>: These points have triangular blades which exhibit convex, concave, or irregularly shaped lateral edges. All have wide, shallow side or corner notches. Basal edges are slightly concave or irregular.

	Minimum	Maximum		
Length	37.3	43.6		
Blade Width	12.0	21.7		
Thickness	5.9	7.5		
Stem Length	8.2	13.5		
Stem Width	8.6	15.0		
Neck Width	11.7	16.2		
Weight	5.3	7.5		

Raw Material: Chert (4)

"Miscellaneous Type 5": 6 specimens

<u>Description</u>: These specimens are shoulderless to slightly shouldered points whose blades give way to slightly contracting stems. Five specimens have convex lateral edges; one specimen has straight edges. Four specimens are similar to *Desmuke*, "Lerma-like" and "Wells-like" points but have straight basal edges.

	Minimum	Maximum	
Length	42.3	50.0	
Blade Width	15.6	16.3	
Thickness	9.0	9.2	
Stem Length	14.6	23.6	
Stem Width	8.3	10.8	
Neck Width	14.5	15.6	
Weight	5.5	8.5	

Raw Material: Chert (5), silicified wood (1)

"Miscellaneous Type 6": 1 specimen

<u>Description</u>: This small, well-made point is shoulderless. The blade has slightly convex lateral edges. The blade gives way to a parallel-edged stem which is slightly narrower than the blade. The basal edge is characterized by a U-shaped notch.

Length	42.2
Blade Width	16.5
Thickness	8.3
Stem Length	9.0
Stem Width	18.0
Neck Width	15.6
Weight	6.9

Raw Material: Chert

RELATIVE FREQUENCY OF TYPES

In a collection of this size, the relative frequency of various types of points may provide some insight as to the cultural affiliations of the prehistoric inhabitants of McMullen County. The number of specimens of each type were plotted (see Chart 1).

Several interesting observations can be made from these data. Note that the predominate types (Tortugas, Desmuke, Matamoros, Catan, Refugio, and Abasolo) are all very typical southern Texas types. If Lerma and Lerma-like points are grouped together (23 plus 29 = 52) and the three types of Ensor are totaled (77), the cluster of predominate types would be increased and still remains very typical of deep southern Texas. This type of cluster of most frequent types suggests that local inhabitants are responsible for the majority of the Archaic projectile points in the collection. Cultural affiliations are local and are related more to the south (to the area of the Rio Grande River) than to other areas.

The next most frequent cluster of types (Langtry down through Wells-like) are mainly Edwards Plateau and central Texas types. Their occurrence in McMullen County in moderate numbers may imply contact of some sort (trade, movement of groups, etc.) between the Edwards Plateau and McMullen County. This is not a surprising conclusion since the major river drainages in McMullen County originate on the Edwards Plateau and in the Balcones Escarpment.

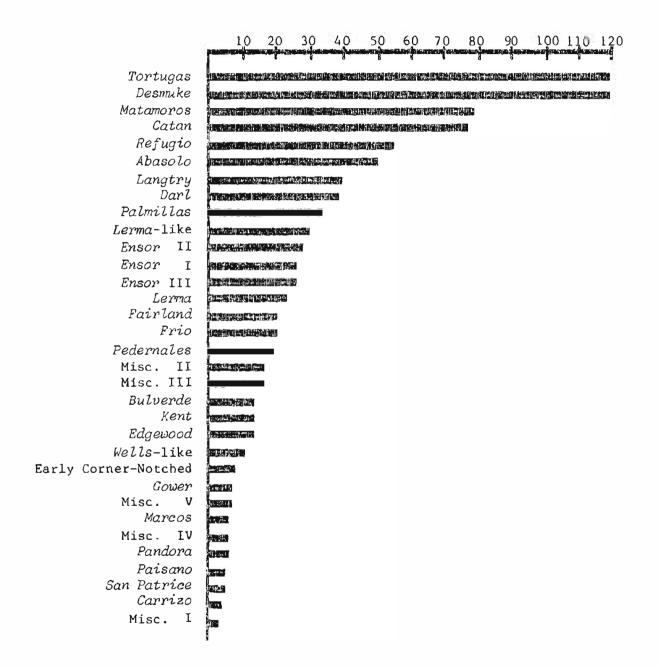


Chart 1. Relative Frequency of Projectile Point Types from the McMullen County Collection of Brom Cooper. Point types represented by only one specimen are not shown (Bell, Lange, Martindale, Travis, Misc. VI).

Early Archaic/Pre-Archaic types (Early Corner-Notched, Gower, San Patrice, etc.) are relatively rare (all less than 10) in the collection, yet their presence in McMullen County is significant in terms of documentating the known distribution of the types. Of particular interest is the presence of San Patrice points, a type generally associated with northeastern Texas, northwestern Louisiana and southeastern Oklahoma. The San Patrice has not previously been reported in the literature for south Texas and its occurrence in McMullen County hints at at least some minimal relationship or contact with northeast Texas.

SUMMARY

Projectile points representing all phases of chronological prehistory are present in the Bromley F. Cooper collection of prehistoric artifacts from western McMullen County. The arrow points have been documented by Hemion (1980b) and the Paleo-Indian forms have been discussed by Kelly (1982). The remainder of the projectile points range from the early Pre-Archaic stage to the terminal stages of the Archaic. Hall (Hall, Black and Graves 1982:469) has tentatively proposed the following chronology for south Texas based on Phase I investigations at Choke Canyon:

Paleo-Indian Period	9000 B.C6000 B.C.
Pre-Archaic Period	6000 B.C3500 B.C.
Early Archaic Period	3500 B.C2500 B.C.
Middle Archaic Period	2500 B.C 800 B.C.
Late Archaic Period	800 B.CA.D. 1200
Late Prehistoric Period	A.D. 1200-A.D. 1530

The Cooper collection contains a typical assortment of south Texas dart points; however, several types are unusual for this region. Because the points in this collection were surface-collected from numerous sites, interpretations are severely limited. Until additional extensive, well-controlled, dated excavations are carried out in this region of south Texas, the significance of these dart points, in terms of chronology, technology and distribution, will remain speculative.

For information regarding the Archaic period as well as the other stages of cultural development in the south Texas region, the reader should consult Hester (1980) and Hall, Black and Graves (1982).

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Correction to Volume 9, Number 4, October 1982

The author of the paper titled, "A Brief Description of Three Items from the Arthur Bickham Collection" was erroneously listed as E. R. Mokry, Jr. The correct author for this article is Rita Gunter.

Please correct this error in your copy of the October 1982 issue of the journal. The editor apologizes to both these individuals, and to Mr. Bickham (whose collection was being reported) for this error.

THE MEDINA POINT: A NEW DART POINT TYPE

William B. Carroll

ABSTRACT

This paper presents a new dart point type of distinct and consistent form which has been excavated from open site burned rock middens in the southern edge of the Texas Hill Country. It is the desire of the author to provide data and to solicit information as to further distribution of same.

INTRODUCTION

One burned rock midden on Winans Creek in Bandera County (see Figure 1), approximately two miles above its confluence with the Medina, has produced in excess of 150 of a new point type. Shape, size, and flaking style are quite consistent throughout the sample.

DESCRIPTION

The point is a large triangular shape with edges straight to convex, commonly slightly recurved. Shoulders are rounded and notches are only slight indentions in the blade. No barbs are present. Stems are flat to slightly rounded and are wedge-shaped. This last feature is consistent on more than 150 specimens in the sample examined. Basal thinning flakes are prominent and well executed. Points are percussion flaked except for the tip area, which shows fine pressure retouch. Bevelling is absent on both the blade and the stem.

Of 120 specimens from the type site, ten considered typical were measured. Width: max. 35.9 mm; min. 28.4 mm. Length: max. 78.9 mm; min. 56.9 mm. Thickness: max. 9.8 mm; min. 6.6 mm. Two reworked points are included, and do expand the length range slightly.

Stratigraphically, the points appear to postdate *Bulverde* slightly, are coincident with the earliest *Pedernales*, and predate *Castroville*. This would assign them to the Middle Archaic stage.

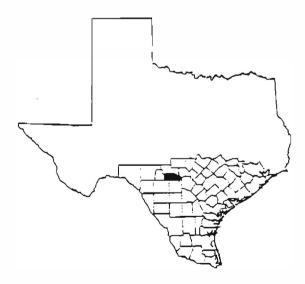


Figure 1. Map of Texas showing Bandera County (darkened area).

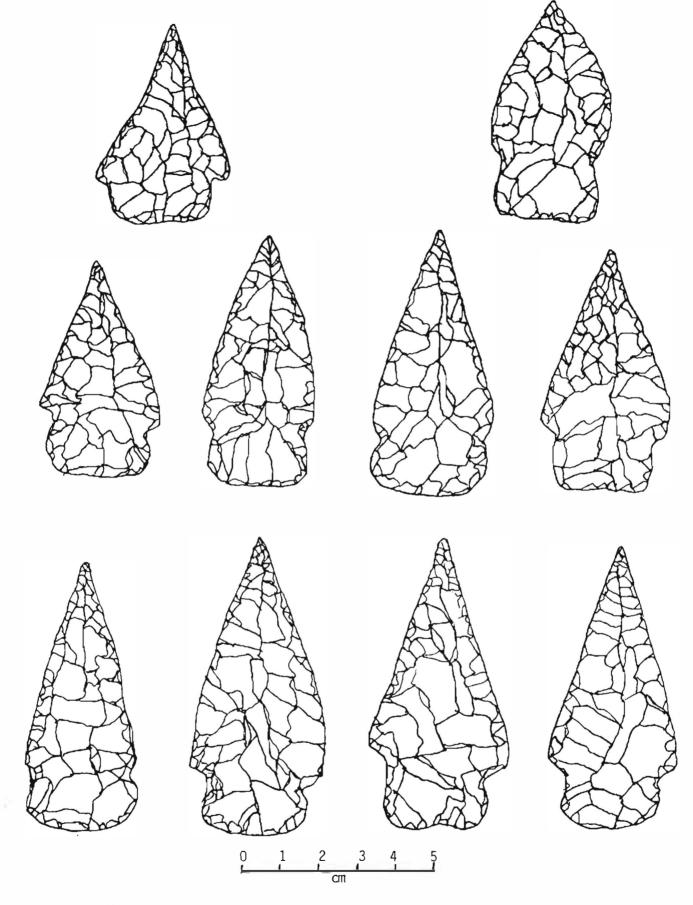


Figure 2. Medina dart points from Bandera County, South Central Texas. Note that the top two points illustrated have been resharpened. (Drawings to scale, courtesy of Lee Patterson.)

No points with the characterics of this type have been formally recognized in Texas (Suhm and Jelks 1962). It is noted that Hester, in his report on the La Jita site (Hester 1971: Figures 11a, 11b, 11c, 11d, 11e), presents a new point type vaguely similar in outline, however none are complete. In his description, he notes stem bevelling, and some basal concavity. This does not appear on the points reported here.

It would appear from my investigations that the points are restricted geographically to that portion of South Central Texas drained by the Medina and Frio Rivers. At present, all known examples are from Real, Uvalde, or Bandera Counties. I have examined approximately 20 specimens from collections in Uvalde, all of which come from the Indian Creek area in the north part of that county. They fall within the size limits mentioned above, and are quite consistent in manufacturing technique.

The point obviously has a very limited distribution, and the area of greatest concentration appears to be around the juncture of the Medina River and Winans Creek in Bandera County. For that reason, I suggest that it be assigned the name of *Medina* Point, and that it be considered to be a local type which probably dates from the Middle Archaic.

ACKNOWLEDGMENTS

I wish to thank Mr. Don Screws of Belton and Mr. Larry Baxter of Uvalde for permission to examine their collections. The art work is the product of Mr. Lee Patterson of Houston. J. B. Sollberger of Dallas assisted in the examination of the points.

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STAA SUMMER FIELD SCHOOL SCHOLARSHIPS

Funds are still needed to support the award of three \$100.00 scholarships for summer Field School participants working in the south Texas area. Some funds have been raised through donations at STAA quarterly meetings, but there is a need for additional money. Remember that donations to this fund are tax deductible. Please make your check to "STAA Scholarship Fund" and send it to the Treasurer, STAA, 123 East Crestline, San Antonio, Texas 78201.

AN ARCHAEOLOGICAL SURVEY IN NORTHWEST VAL VERDE COUNTY, TEXAS

L. W. Patterson

INTRODUCTION

This article describes an archaeological survey made in northwest Val Verde County, Texas (see Figure 1). While a large number of archaeological sites have been recorded in this county, the specific area of this survey is relatively unknown. This survey area is located on the east side of the Pecos River, northwest of Pandale, on a ranch owned by Tenneco Oil Exploration and Production. The general area is very rough country, not accessible by public roads.

The climate in this region is arid, with too little grass production to support many cattle. Goats and sheep are the main livestock raised here. Wildlife in this region includes white-tail deer, javelina, turkey, quail, rabbit, and skunk. A few imported nutria now live in the Pecos River. The main water sources here are the Pecos River and a few hillside springs. Tributaries of the Pecos River remain dry most of the year.

A total of eleven archaeological sites were recorded during this survey, reflecting a long occupation time during the Archaic period, and perhaps one historic Indian site. A tentative picture of major Archaic settlement patterns was established by the resulting data. All of the sites found during this survey seem to indicate a hunting and gathering lifeway, as found in the Archaic period in most of North America.

Site 41 VV 562

This is a small site located on the first high terrace above the Pecos River. Five flint flakes and seven thick fractured flint pieces were found. One flake shows evidence of heat treatment. An early stage dart point preform was also found. This appears to be an Archaic site, but no good diagnostic items were present.

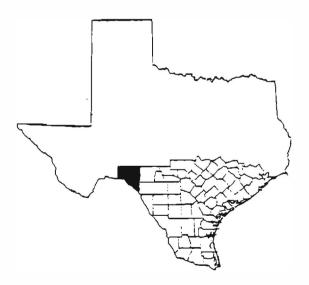


Figure 1. Map of Texas showing Val Verde County (darkened area).

Site 41 VV 563

Site 41 VV 563 is approximately 75 feet in diameter and is located on the first high river terrace. A few freshwater shellfish remains were found, as the only evidence of a utilized food resource. Four dart point preforms and two preform fragments were collected, along with two miscellaneous bifaces. Unifacial stone tools found include one concave scraper, one convex side scraper, two denticulates, and one graver. Some of the lithic artifacts from the various sites are illustrated in Figure 2. Four flint cores and ten thick pieces of flint were also found. A tabulation of flakes collected at this site is given in Table 1.

Site 41 VV 564

This site is about 200 feet in diameter, including a burned rock midden that is approximately 75 feet in diameter. Most of the lithic artifacts were collected outside of the central midden. Two dart point preform fragments were found, along with two miscellaneous bifaces. Unifacial tools recovered include two burins, four denticulates, two convex side scrapers, and one end scraper. Five miscellaneous flint cores and five thick pieces of flint were found. Data on flakes collected is shown in Table 1. There is evidence of heat treating of flint in the form of reddish discolorations and waxy luster on some specimens.

Site 41 VV 565

This site is approximately 200 feet in diameter, with an area of exposed burned rock midden 25 feet in diameter. The midden may be of larger size than can be observed. Some freshwater shellfish remains are present. A Bulverde dart point made from heat treated flint was found, together with two whole preforms and two preform fragments. A Middle Archaic occupation may be indicated by the Bulverde point. Unifacial tools recovered include one burin, two gravers and two denticulates. Three miscellaneous flint cores and 20 thick pieces were collected. Data on flakes found here is given in Table 1. One flake has a well developed edge damage pattern that is typical of cutting use, and several flakes have edge damage patterns typical of scraping use. There is evidence of heat treatment on some of the flakes.

Site 41 VV 566

Site 41 VV 566 is approximately 75 feet in diameter, with much of the area covered by a burned rock midden. This site is located on a second high terrace above the Pecos River. Freshwater shellfish remains are present. One Langtry point, one Paisano point and three dart point preform fragments were found. The dart point types may indicate Middle Archaic and Late Archaic occupations here (D. S. Dibble, personal communication). Unifacial tools recovered include one ovoid scraper, two end scrapers, one concave side scraper, one convex side scraper, one burin, three denticulates, two perforators, and four gravers. Two snub-nosed tools similar to gravers were also found. One miscellaneous thick biface fragment was collected.

Generalized lithic specimens found on this site include four flint cores, 17 thick flint pieces, and the flakes tabulated in Table 1. Some flakes have edge damage patterns that indicate cutting and scraping functions (Tringham et al. 1974; Patterson 1975). Some flake specimens show evidence of heat treatment.

Site 41 VV 567

This is a small site located on the top of a low hill that overlooks the main terraces of the Pecos River. The long range view available would have made this an ideal location for hunting observation. One *Travis*-like lanceolate point

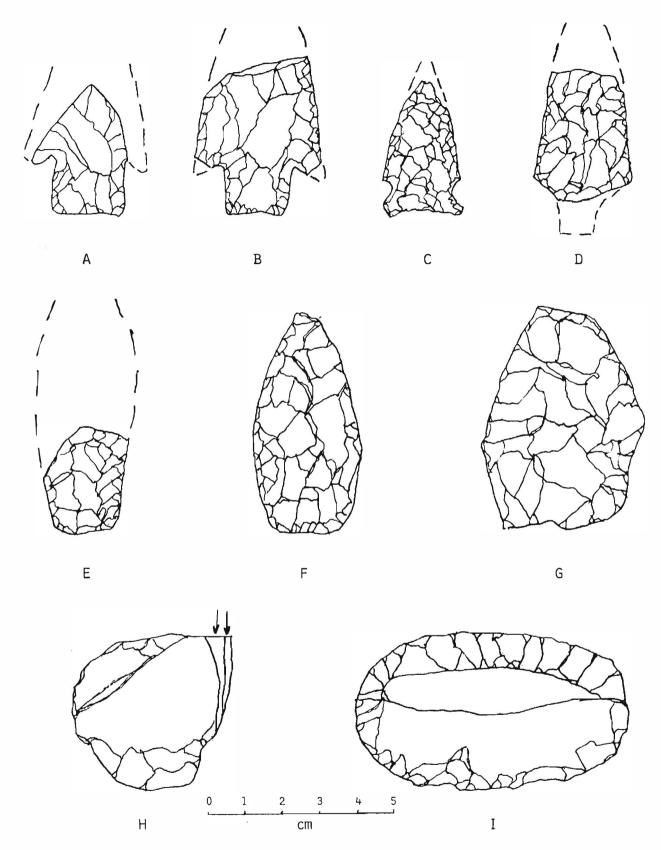


Figure 2. Val Verde County Lithic Artifacts. A, Bulverde point, 41 VV 571; B, Bulverde point, 41 VV 565; C, Paisano point, 41 VV 566; D, Langtry point, 41 VV 566; E, Travis (?) point, 41 VV 567; F, preform, 41 VV 565; G, preform, 41 VV 563; H, burin, 41 VV 564; I, ovoid scraper, 41 VV 566.

stem was found, that may indicate an Early Archaic or later occupation (Word and Douglas 1970:36). The stem does not have ground edges, as is typical of Paleo-Indian lanceolate points. Unifacial tools found here include one graver and two denticulates. The collection includes five flakes, three thick flint pieces and two miscellaneous cores.

Site 41 VV 568

This site is located on another low hill, several hundred yards from site 41 VV 567. The lithic collection consists of three flakes, one denticulate, and two convex side scrapers. While chronological placement is not possible, this site indicates another use of the low hills overlooking the Pecos River.

Site 41 VV 569

One flake and one denticulate tool were found on another low hill about one mile from site 41 VV 568, indicating still another use of this type of location.

Site 41 VV 570

Site 41 VV 570 is a pictograph site located on the Malone ranch that is adjacent to the Tenneco ranch. This painting was made on a rock wall at a natural spring location. The pictograph design is illustrated in Figure 3. One of the items might be interpreted as a church with a cross on top, which would indicate association with historic Indians.

I was informed that the Malone ranch has a large number of burned rock middens. A collection of projectile points made here by Mrs. Myrtle Malone includes Pandale, Ensor, Langtry, Paisano and Bulverde types. Some small painted rocks have also been collected.

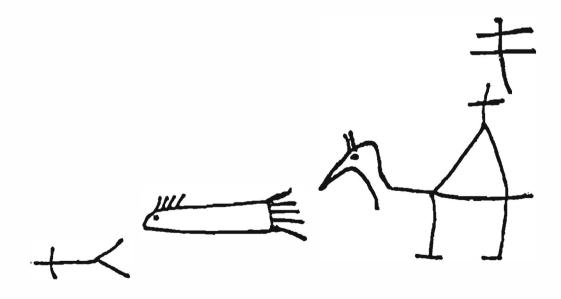


Figure 3. Val Verde County Pictograph, Site 41 VV 570.

Site 41 VV 571

This is another site located on the first high terrace above the Pecos River. A *Bulverde* point made of heat treated flint, and scattered flakes were found here. This could be another Middle Archaic occupation in this area.

Site 41 VV 572

A few flint flakes were found at this location, which is still another site located on the first high terrace above the Pecos River.

TABLE 1
Flake Size Distributions

Flake Size (MM Square)	41 No.	VV 563 ————————————————————————————————————	41 No.	VV 564 	<u>41</u> <u>No.</u>	VV 565 %	41 No.	<u>VV</u> 566 <u>%</u>
Under 15	1	3.0	_	_	4	6.3	19	20.0
15-20	5	15.2	5	12.5	19	29.7	28	29.4
20-25	10	30.4	9	22.5	21	32.7	21	22.1
25-30	5	15.2	7	17.5	8	12.5	10	10.5
30-35	5	15.2	9	22.5	8	12.5	11	11.6
35-40	2	6.0	6	15.0	2	3.1	3	3.2
40-50	3	9.0	3	7.5	1	1.6	3	3.2
50-60	1	3.0	1	2.5	1	1.6	_	-
60-70	1	3.0		Į) <u> </u>
	33	100.0	40	100.0	64	100.0	95	100.0

COMMENTS ON LITHIC TECHNOLOGY AND CHRONOLOGY

Flake size distributions for four sites are tabulated in Table 1 (above). The type of flake size distributions for sites 41 VV 565 and 566 are characteristic of bifacial reduction activities, with exponential increases in smaller size flakes (Patterson 1982; Patterson and Sollberger 1979:111). The flake size distributions for sites 41 VV 563 and 564 do not indicate bifacial reduction activities even though bifacial preforms and preform fragments were found on these sites. This may simply be the result of small sample bias, or this could reflect a higher proportion of lithic manufacturing activities for items other than bifaces.

Several of the sites found in this survey have burins. This type of stone tool is well known in the lower Pecos River area (Epstein 1960). It should also be noted that lithic raw materials are fairly abundant in this area.

While there is no chronological data available for this specific area, Dibble (1967) has given some data on projectile point chronologies for this general region that may apply here. At Arenosa Shelter, southeast of this specific area, Lamgtry points occur from 2400 to 2000 B.C. Bulverde-like and Pandale points are earlier here than Langtry points. Paisano points start at approximately A.D. -0-and continue for a few hundred years, occurring with Frio points.

At Baker Cave in Val Verde County, Word and Douglas (1970:99-100) show a variety of *Langtry* point variations dating from 4000 B.C. to A.D. 1000 in Periods 3 to 5.

Point types in this article follow the descriptions given by Suhm and Jelks (1962).

Ross (1965:Fig. 32) compares projectile point chronologies for several sites in Val Verde County. *Langtry* points range from 4000 B.C. to A.D. -0-. *Pandale* points range from 5000 to 2000 B.C.

SETTLEMENT PATTERNS

Two types of site locations were identified by this survey. One type of location is the use of the high flat terraces above the Pecos Rover. Sites in this type of location would normally not be subject to river flooding, but would still be fairly near to the water resource. The other type of location is the use of the tops of low hills that overlook the river terraces and side draws. This would be a good location for long distance hunting observation, as well as for more immediate hunting opportunities in the side draws.

As part of this survey, a number of natural rockshelters in the deep side canyons of the Pecos River were examined. Most of these rockshelters are located one to two miles from the river on steep sides of canyons. No Indian remains were found in any of the rockshelters investigated. This does not seem to be a preferred type of campsite location in this specific area, possibly because of the long distance to a water source. Single utilized flint flakes were found at widely scattered locations during the side canyon surveys. These specimens may indicate specific tasks being performed at locations other than campsites, such as butchering or plant processing.

There are numerous burned rock middens in this region. There is also an abundant supply of Sotol plants. One of the speculated uses for burned rock middens is the cooking of vegetable materials, such as bulbs from the Sotol plant (Wilson 1930).

SUMMARY

This article has described a brief archaeological survey conducted in northwest Val Verde County. The survey results demonstrate that there was significant occupation of this specific area during the Archaic period, by small bands of nomadic hunter-gatherers. A pictograph site found here may represent historic Indian occupation. More detailed research would be required to define a complete cultural sequence for this specific area. The archaeology of this region remains rather poorly defined, even though there appears to be abundant archaeological resources here.

ACKNOWLEDGEMENT

Appreciation is expressed to Kelley I. Brown of Tenneco Oil Exploration and Production for his aid in this survey.

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Metal Detector Services

STAA member, Jack Jenkins, has considerable experience in using a metal detector and has some good equipment. He has volunteered to use the metal detector if such services are needed in STAA activities. If you have need of such services, please give Jack a call at (San Antonio) 512-655-7975.

THREE METAL PROJECTILE POINTS FROM A HISTORIC INDIAN WORKSHOP SITE

Wayne Parker

Three unfinished metal projectile points and three cut metal fragments have recently been recovered just off the caprock rim in southern Crosby County, Texas. The dimensions for all three points are exactly the same, except for the length because of the missing distal tips. The writer suggests that metal projectile points were being manufactured on this Historic workshop site, which was probably utilized by the Comanche Indians from A.D. 1750 to 1875. There is a strong possibility that more metal artifacts remain on the site.

The Wheeler Site (41 CB 29) is located some seventeen miles south of Ralls just off the caprock rim in Crosby County, Texas. The site is located on both banks of the Salt Fork of the Brazos River. Numerous fire hearths, flint chipping material and bone debris are visible over the location. Both dart and arrow points from the Archaic and Neo-Indian periods have been surface collected. The latest recovery of metal projectile points from the Historic period is the theme of this paper. The site, which is geographically located on small hills overlooking the fresh spring water of the Brazos, was ideal for the many different groups who lived here through the ages.

Charles and Sue Thornton found two metal points and the writer found a third metal projectile; Nora Thornton found three cut metal fragments which were discarded during the manufacturing process (Figure 2). The six metal artifacts were found within a thirty-yard length of a new road which was graded through the Wheeler Site and some 20 to 12 inches below the surface.

This location was obviously used sometime during the Historic period. The three identical metal points (except for the missing distal tips) and the cut metal fragments indicate the site was utilized by a group of people manufacturing metal points.

Three different groups of people could have occupied the workshop site during the Historic period: 1) The Lipan Apache who were in this immediate area sometime before A.D. 1500 to about A.D. 1750; 2) The Comanche Indians who asserted themselves around A.D. 1750 and were dominant until A.D. 1875; and 3) The Mexican Comancheros who were selling stolen cattle from this area of New Mexicans in Santa Fe from A.D. 1865 to 1869. These Mexican Comancheros were also trading metal points

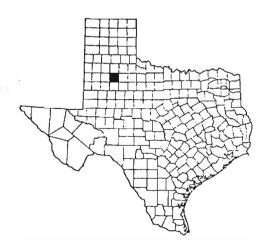


Figure 1. Map of Texas showing Crosby County (darkened area).

to the Comanche Indians on the Llano Estacado and Blanco Canyon. Any one of these three groups could have occupied the Wheeler Site; however, it is an assumption by the writer that the workshop site was probably utilized by the Comanche Indians. Future archaeological investigation may prove otherwise.

It is a well-known fact that the Indians from the Historic period were using scrap metal, sheet iron, files, clocks, door hinges, brass cartridge cases, and the more desirable barrel hoops to fashion their metal artifacts. In fact, they used any type of metal that could be confiscated.

The maximum thickness of the recovered metal points and cut metal fragments is 1 mm (Figure 2). The writer suggests that these artifacts were probably fashioned from barrel hoops. One of the projectile points is plano convex at the cross-section which indicates that this point was manufactured from a curved barrel hoop. Also, two of the metal specimens have original smooth edges which resemble the outside edge of barrel hoops with no hack marks visible.

The exact likeness of the three metal projectile points in size almost suggests that they were manufactured from a stabilized mold or an original proof pattern. The stem length and width, maximum width at the shoulder and thickness are precisely the same. Only the missing distal tips make a difference in the length. Hack marks are visible on all three specimens where the shoulder and stem unite. These hack marks are on the same side from which the points were chiseled from their original metal donor.

The three small cut metal fragments recovered from the workshop site are remnant sections which were located between the shoulder and stem of the projectile points. These were extracted during the manufacturing process.

It was suggested by Frank Runkles, an avid amateur archaeologist, that the three metal projectile points were not yet finished arrow points ready for a wooden shaft. The missing distal tips were not broken, but were not yet completed. Runkles (personal communication 1982) suggests that during the manufacturing process these three projectiles were hacked from their metal donor with the distal tips being absent. The projectile points would later be smoothed with an abrasion stone or file to form a sharp pointed tip.

Both sides of the three metal projectile points and the three cut metal fragments are moderately oxidized with some rust pitting. The three incomplete points are 25 mm, 35 mm and 40 mm in length. The average length of several other metal points from various sites in Crosby County is 65 mm. The workshop on the Wheeler site is producing smaller metal arrowpoints than the average for this area.

The chances of recovering more metal points from this site are likely and encouraging. The writer plans to use a metal detector on the site and hopefully collect other specimens before critical oxidation destroys the artifacts. Otherwise, the Wheeler Site will be preserved for future archaeological recognizance when time and professional personnel can be obtained.

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Metal Projectile Points

Dimension Chart (in millimeters)

	<u>A</u>	<u>B</u>	<u>C</u>
Length (incomplete)	25	35	40
Maximum Width of Blade	15	15	15
Thickness	1	1	1
Width of Stem	6	6	6
Length of Stem	6	6	6

NOTE: The maximum width of the blade, thickness, width and length of stem for all three metal projectile points are the same. Only the missing distal tips project a difference in the length.



Cut metal fragments from workshop site

Figure 2. Metal Projectile Points and Cut Metal Fragments from 41 CB 29.

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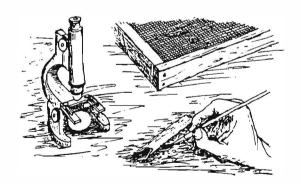
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FIELD AND LABORATORY HANDBOOK

ROGER H. HEMION



SPECIAL PUBLICATION NO. 2 SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

1983

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- WILLIAM B. CARROLL is a professional electrical engineer who graduated from Texas A&M University; he lives in Houston. He is a long-time collector of Indian artifacts and has an interest in experimental flintknapping, which he shares with Lee Patterson. Mr. Carroll has previously reported two obsidian Paleo-Indian points from Val Verde County, Texas, in the July 1978 issue (Vol. 5, No. 3) of this journal.
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- BILL MOORE is a graduate of Texas A&M University with an M.A. in Anthropology. He has archaeological field experience in Louisiana, Mississippi, Nevada, and Texas. Bill is an archivist with Heartfield, Price and Green, Inc., an archaeological research and consulting firm in Monroe, Louisiana. In this issue, he continues his series of reports of previously unreported sites in west-central Texas.
- WAYNE PARKER is a member of the Crosby County Museum Association and lives near Ralls, Texas. He has previously published a variety of reports in this journal and others, including the Bulletin of the Texas Archeological Society, Central States Archaeological Journal, and Artifacts. He has also authored a major report of the Bridwell Site, which was published in 1982 by the Crosby County Museum Association, as well as his report of the recovery of a late prehistoric wooden bow in our last issue.
- LEE PATTERSON of Houston is extremely well known to any reader of La Tierra as one of the most prolific writers in Texas. He is very active in the Houston Archeological Society as well as the Texas Archeological Society and has published in a very wide range of journals including the Bulletin of the Texas Archeological Society, Plains Anthropologist, American Antiquity, and the leading Canadian journal. Lee continues, in this issue, to document previously unreported sites in west and south Texas.
- MICHAEL C. WOERNER lives in San Antonio and is currently working on a Masters in Business Administration with The University of Texas at San Antonio. He has a B.A. in Anthropology from the University of Texas at Austin and has worked for the Center for Archaeological Research at UTSA on the Choke Canyon and Colha projects.

INFORMATION FOR CONTRIBUTORS

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

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

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

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

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

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