

GUIDE
to the identification of certain
AMERICAN INDIAN PROJECTILE
POINTS

ROBERT E. BELL

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Robert E. Bell
Department of Anthropology
Oklahoma University
Norman, Oklahoma

INTRODUCTION

This guide to the identification of certain American Indian projectile points is designed to acquaint the reader with a series of projectile point types that have been identified and named by archaeologists. As a guide it is far from complete, and there are many additional types of projectile points which are not included here; also, there are a number of distinctive forms which have not been typed. As far as I can judge, there are somewhere between 150 and 200 projectile point types that have been named in the United States; of these, only 50 are discussed here, for reasons that will be mentioned later.

This publication is entirely the result of interest expressed by members of the Oklahoma Anthropological Society and other persons interested in arrowheads. It is designed to bring together available information on projectile point types for amateur archaeologists, collectors, or anyone having an interest in the subject. This information, for the most part, is scattered throughout a variety of sources, often publications of limited distribution or those obscured by a more technical language, so that it is frequently available only to the professional archaeologist.

In January, 1952 a brief mimeographed article on arrowheads appeared in the Department of Anthropology Archaeological Newsletter (Bell, 1952, pp. 1-12). This included some general comments and observations plus a brief description and outlines of thirteen named point types. This paper proved to be of much general interest and our supply of copies was soon exhausted. With the organization of the Oklahoma Anthropological Society in the Spring of 1952, and the establishment of a publication series, I decided to present more data on named types in our first bulletin. With the aid of Roland S. Hall who prepared the drawings, we published a brief description of some 44 types in Bulletin I (Bell and Hall, 1953, pp. 1-16).

For Bulletin II, Richard P. Wheeler of Lincoln, Nebraska prepared similar data for some eleven additional types that had not been included earlier (Wheeler, 1954, pp. 1-6). These bulletins have been out of print for some time.

In the meantime, more knowledge of named types has become available, and many new types have been established. Other publications have presented descriptive material for regional areas (Scully, 1951; Suhm and Kreiger, 1954; Kueberg, 1956). In 1956 I planned to revise the earlier work, which had appeared in the bulletin of the Oklahoma Anthropological Society by adding new material, increasing the number of examples representing the type, and supplementing the associated descriptive information. I planned, initially, to gather together data on all named point types, to supply a page illustration showing several examples of the type in actual size, and to include a more extensive description and comments about each category. With this in mind, I planned on assembling material for at least 100 named types, which would then be published as a Special Bulletin. The work progressed very slowly, however, and, as a result, it was decided at the annual meeting of the Oklahoma Anthropological Society in April, 1957, that we should publish the work that had been completed rather than wait until more data were compiled. When additional material is ready, it will be published as a second or third Special Bulletin; in the meantime, this Bulletin is the result of current work, and material is already being prepared for Special Bulletin Number 2.

The types which are included herein were not selected from the total number of named types because they are believed to be more important or better known. They are merely those on which work has been completed up to this date. The drawings have been prepared as specimens or photographs became available, and they have been selected for this Bulletin only because the illustrations were completed.

The illustrations are presented in actual size in all plates. I have attempted to select typical examples for each type and to pick specimens which were characteristic rather than to include a wide range of variation. In the plates where considerable variation exists, I have indicated one or more examples which represent an ideal or classic example.

It should be understood that this represents only a guide to aid in identification. It does not replace experience acquired in seeing and examining actual identified specimens. Although the descriptive material and the illustrations will serve as a guide, one should take every opportunity to study any original specimens that have been properly identified.

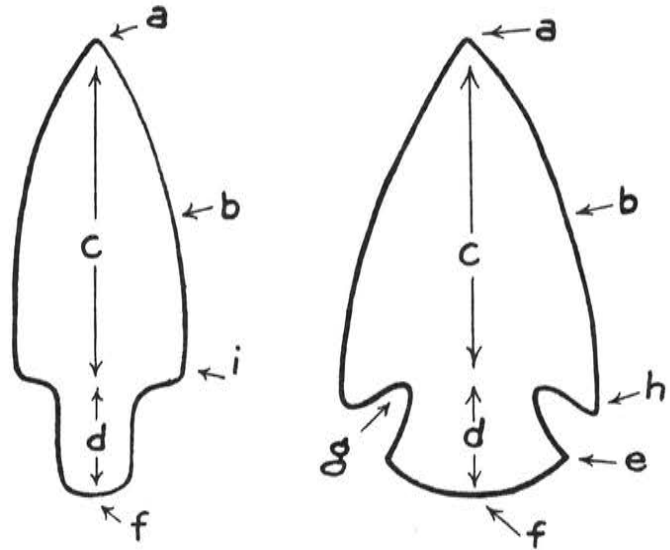
The descriptive material and illustrations have been arranged in a simple alphabetical order, and I have made no effort to separate arrowheads from dart or spear points. They are best described as projectile points because it is often impossible to determine whether an individual specimen was used as an arrow point, dart, or spear point. As a general rule, the small sized, thin, pressure flaked points, commonly called "bird points" by collectors, are arrowheads, while the larger and heavier points are dart points or spearheads. One cannot, however, be certain about the artifact's function, unless it is hafted, and such finds are rare indeed. For example, I may use my pocket knife as a knife, punch, reamer, scraper, drill, can opener, screw driver or for some other purpose. Likewise, many artifacts listed here as projectile points may have served other purposes such as knives, drills, scrapers, etc.

The descriptive information which goes along with each plate gives important data necessary to identify the type. It includes information on the type name, a description of the type, the distribution, estimated age and cultural affiliation, remarks and source of plate illustrations. Additional data can be obtained from the references included in the bibliography.

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- a) the point or tip
- b) the edge
- c) the face, body or blade
- d) the stem
- e) the tang
- f) the base
- g) the notch
- h) the barb
- i) the shoulder

STANDARD PROJECTILE POINT TERMINOLOGY

ABASOLO POINTS

The Abasolo point has been named by R. S. MacNeish from types found in southern Tamaulipas, Mexico. It has been described and illustrated by Suhm and Krieger (1954, p. 400).

Description

The Abasolo point is a leaf-shaped stemless dart point. Suhm and Krieger (1954) describe the type as follows: "Triangular to leaf-shaped blade with straight to slightly convex edges. Base is weakly convex to well rounded, almost semicircular, which is the chief distinction from closely related Tortugas points. Blade often beveled, either along right or left edge of each face; in some cases the edges are not so much beveled as steeply chipped on both edges of one or both faces. Base may be thinned to facilitate hafting."

The length is generally from $1\frac{1}{2}$ to $2\frac{1}{2}$ inches, although longer examples are known.

Distribution

Suhm and Krieger (1954) list the type as "most common in Rio Grande valley below Laredo and continuing into Tamaulipas, Mexico. Becomes progressively less frequent eastward along Gulf coast and northward into central Texas and Pecos River mouth, but may be expected to occur occasionally in all parts of Texas except extreme north and Panhandle." Similar shaped points are found in Oklahoma and elsewhere.

Age and Cultural Affiliation

The type apparently began in the interval between 5000 and 3000 B. C. in south Texas. It apparently disappeared around 500 A. D. in most areas but survived in the lower Rio Grande valley until the 18th century (Suhm and Krieger, 1954). The type is normally associated with non-pottery sites.

The Abasolo type is one of the principal types of the Falcon Focus in southwest Texas. It also occurs in the Pecos River Focus, the Aransas Focus, Edwards Plateau Aspect and East Texas Aspect. Cultural affiliations in Oklahoma are not established.

Remarks

The Abasolo point may also have served as a knife rather than a projectile point. The type closely resembles the Tortugas point but differs in that the base is rounded; the Tortugas type has a straight or slightly concave base. The Abasolo point also resembles Catan in all characteristics except size; the Catan is a smaller sized point. A small sized Abasolo and a large sized Catan point would overlap in all features. Specimen B represents a typical example.

Source of Plate Illustrations

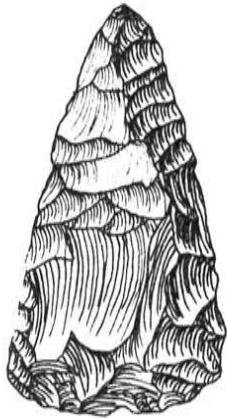
All drawings were made from Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - F. Bell	893	F - 51D3-2-34
B - 4-2-1169c		G - 5-25-1742-6
C - F. Bell	85	H - F. Bell 823
D - #18		I - F. Bell 884
E - F. Bell	872	

ABASOLO



A



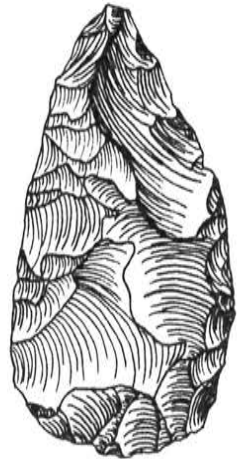
B



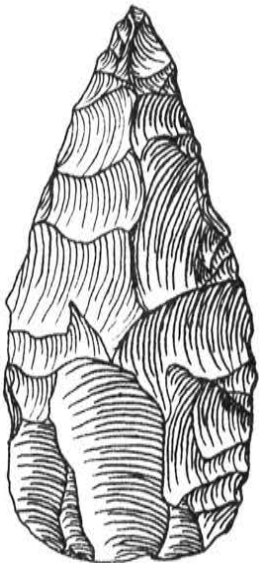
C



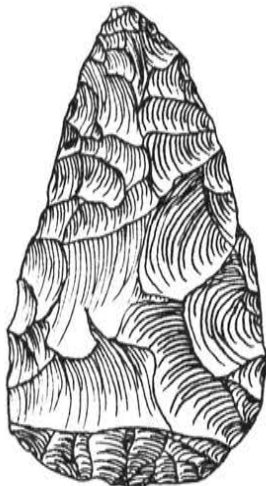
D



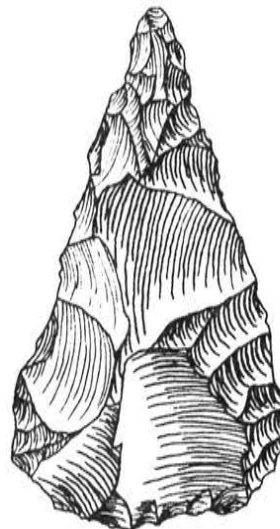
E



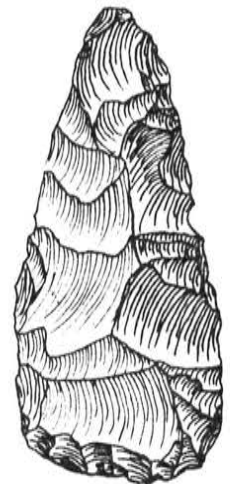
F



G



H



I

ADENA POINTS

The Adena point is a large dart point which has been recognized for a long time as a characteristic type found associated with the Adena culture of the Ohio Valley.

Description

The Adena point is rather large in size with most examples ranging between 3 and 5 inches in length. The stem is broad, typically rounded and approximately semi-oval in outline. The shoulders are prominent but not barbed, and the blade edges form a gentle convex curve extending toward the tip. The Adena points are usually fairly thin, in spite of their width, and exhibit good workmanship in the chipping. In some cases the rounded stem has been ground or smoothed to dull the edges.

Distribution

The Adena type is found chiefly in the upper Ohio River valley, especially the states of Ohio, Kentucky, Indiana, West Virginia and Pennsylvania. They also occur in surrounding areas, and Kneberg (1956) reports the type as represented throughout Tennessee. Specific examples from Oklahoma have not been reported.

Age and Cultural Affiliation

There are a number of radiocarbon dates for Adena sites in Ohio and Kentucky (Webb and Baby, 1957). These assays suggest an age ranging from about 800 B. C. up to 800 A.D. for the Adena point.

The type is associated with the Adena culture, an Early Woodland manifestation in eastern United States. Kneberg (1956) indicates that the type is associated with the late Archaic cultures of Tennessee.

Remarks

This type is quite common in Ohio and the surrounding region where examples are frequently made from the famous multicolored Ohio Flint Ridge material. Specimens A and D in the illustrations represent classic examples of the type. Specimens E and F are variants which Mr. Raymond Baby suggests as an Early Adena variety.

Source of Plate Illustrations

All drawings were made from the original specimens which were found in Ohio. Examples B, C, E, and F were furnished by Mr. Raymond S. Baby of the Ohio State Museum in Columbus, Ohio. The specimen numbers are as follows:

A - 1231	D - 1261
B - 850/42	E - 14/53 15512
C - 17814	F - 5351

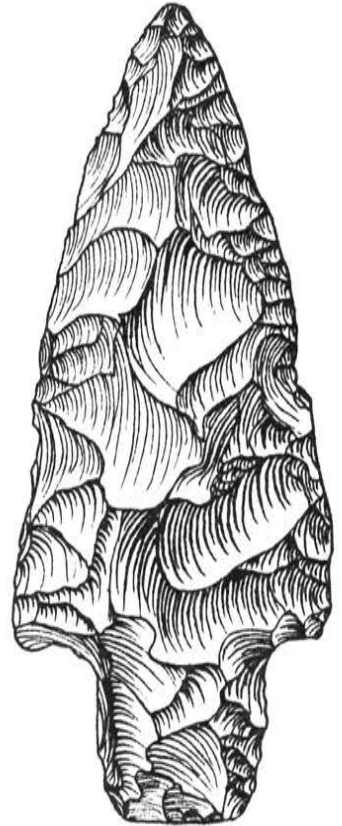
ADENA



A



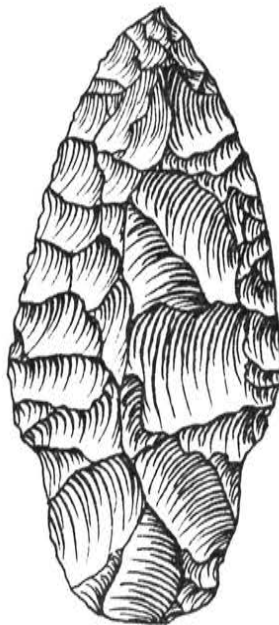
B



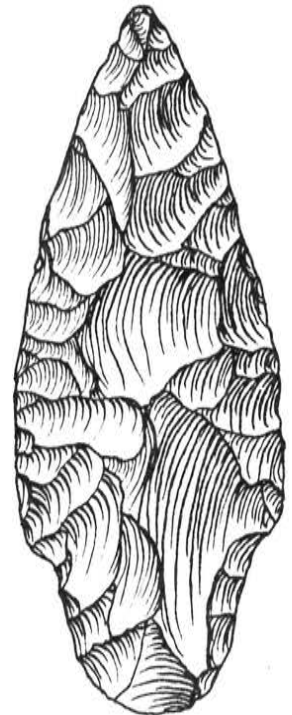
C



D



E



F

AFTON POINTS

The Afton point has been named by Bell and Hall (1953, p. 7) from specimens found near Afton, Oklahoma (Holmes, 1903).

Description

The Afton point is a large dart point characterized chiefly by the angular outline of the blade. The edges of the blade are roughly parallel toward the base but then angle abruptly to form a triangular shaped point. The blade edge is clearly divided into two sections, the section from the barb to the mid-point commonly being concave rather than straight in outline. The stem is relatively short but broad and expanding toward the base. The notches have been cut in from the corner or base to produce large and prominent barbs. The base may be straight or slightly convex. The points are usually of good workmanship, even the large examples being quite thin and well chipped. The size ranges from perhaps 2 inches to 4 inches, most examples falling between 2½ and 3 inches long.

A sub-variety of the Afton point is illustrated in Figure F. In this case, the specimen has the characteristic Afton blade, but the stem contracts slightly to terminate in a straight base. This form is not barbed and tends to be a smaller and perhaps distinct type which should ultimately be differentiated from the barbed variety.

Distribution

The Afton point is found throughout northeastern Oklahoma and the adjacent regions of Arkansas, Kansas and Missouri. Examples are also known from various sections of the Ohio valley, particularly from Ohio.

Age and Cultural Affiliation

The age of Afton points is not clear although they appear to represent an early type. Baerreis (1951) reports examples from the Grove Focus in pre-pottery Archaic levels for northeastern Oklahoma. Surface finds normally appear on non-pottery sites along with large dart points suggesting an Archaic context. An estimated age in all probability would fall between 3000 B. C. and the birth of Christ.

Remarks

The Afton point should not be confused with other points in which a broken specimen has been re-sharpened. The Afton type is intentionally shaped to form the angular outline, and there is no evidence of re-sharpening.

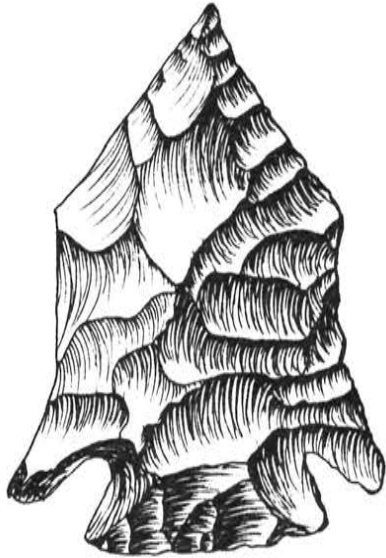
Specimens A through E can be considered as typical specimens of this type. Specimen F represents the sub-variety which appears to be more rare and which may merit separate recognition. Specimen G is rather small in size and lacks the concave edges of the blade; it may possibly be a re-sharpened point rather than a typical Afton.

Source of Plate Illustrations

Drawings A, B, and C were made from photographs illustrated in Holmes (1903). Drawings D and E were made from the original specimens furnished by Robert B. Hill of Tulsa, Oklahoma. Drawings F and G were also made from the original specimens furnished by Tom Gilcrease of Tulsa, Oklahoma. The discovery localities are as follows:

- A - Afton, Oklahoma (Holmes, 1903, Plate 15)
- B - Afton, Oklahoma (Holmes, 1903, Plate 15)
- C - Afton, Oklahoma (Holmes, 1903, Plate 12)
- D and E - Taney County, Missouri
- F and G - No data, probably Missouri

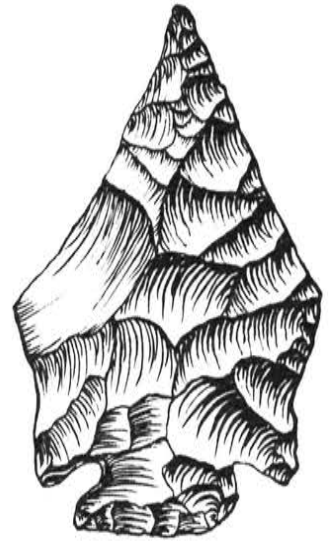
AFTON



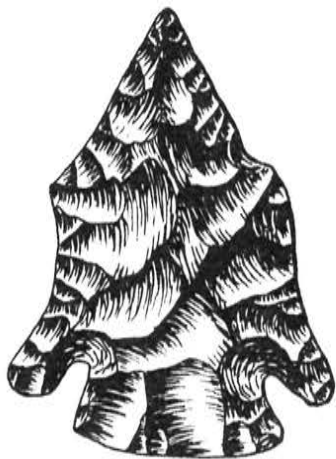
A



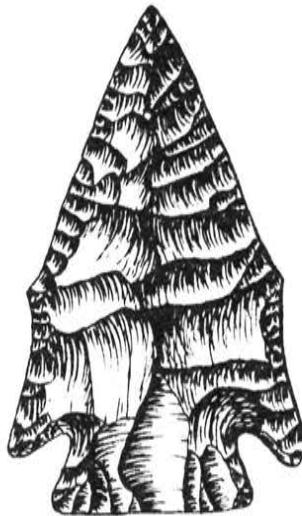
B



C



D



E



F



G

ALBA POINTS

The Alba point has been named by Alex Krieger (1946, p. 115) as a result of research on types found in east Texas. Originally it was called "Alba Barbed".

Description

Newell and Krieger (1949, p. 161) describe the Alba point as follows: "The blade edges are commonly recurved or concave between the widely flaring barbs and the tip; they are sometimes finely serrated. Stems vary from parallel-edges to bulbous and fan-shape. Length varies from $\frac{1}{2}$ to $1\frac{1}{2}$ inch but 1 inch is most common; the stem is usually $\frac{1}{4}$ to $\frac{1}{5}$ the total length."

Suhm and Krieger (1954, p. 494) described the type as follows: "Triangular blade with edges usually concave or recurved, seldom straight. Shoulders wide, outflaring, usually barbed. Stem edges usually parallel, occasionally contracted or expanded slightly. Base straight or slightly convex. Blade edges sometimes finely serrated."

Distribution

The type is found chiefly in the Caddoan area of northeast Texas, eastern Oklahoma, southwestern Arkansas and northern Louisiana. Occasional finds are made around the peripheries of this central area.

Age and Cultural Affiliation

Suhm and Krieger (1954) suggest an age from about the time of Christ up to 1200 A. D. or later. Radiocarbon dates from the Harlan site and elsewhere suggest a date ranging from 700 to 800 A. D. up to 1300 or 1400 A. D.

The Alba point appears to be common during the Gibson Aspect. Suhm and Krieger (1954) consider it "A major type of Alto Focus, occurring also in Gahagan, Haley, and Spiro Foci of Gibson Aspect, and in Wylie, Henrietta, and Galveston Bay Foci, all of Neo-American Stage. Appears in East Texas of Archaic Stage, probably shortly before pottery appears in this area."

Remarks

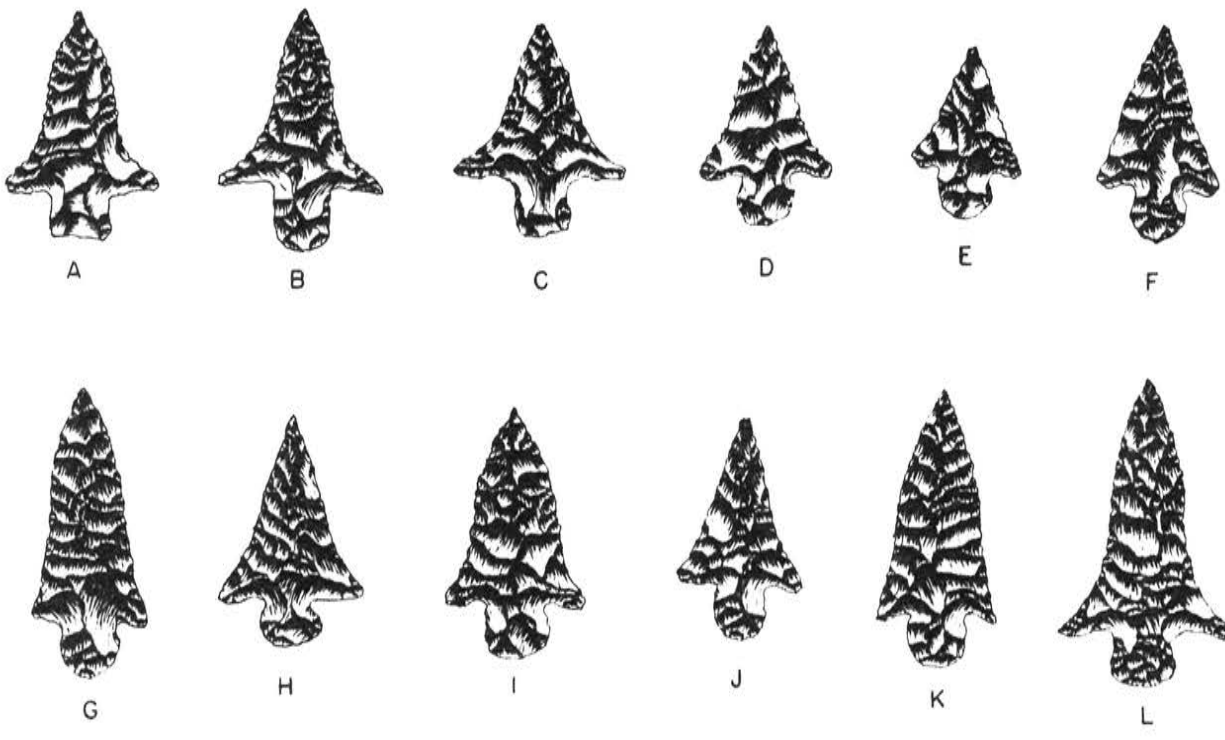
In the illustrations of Alba points (Suhm and Krieger, 1954, Plate 126) the type is limited to those having a rectangular base; the bulbous stemmed forms which were earlier included as Alba points are not pictured. Apparently Webb and Krieger (Webb, 1955, p. 270) have recently limited Alba to include only those forms having a rectangular stem. A number of caches of points have been found at the Craig mound, however, where both the rectangular and bulbous stemmed forms are mixed together. The cache, moreover, is commonly made of a single variety of flint and of equal workmanship, suggesting a single craftsman. I would suggest, in view of this fact, that both the rectangular and bulbous stemmed forms be included in the Alba type as originally described. If later studies demonstrate differences in time or distribution, sub-types or a new type can be recognized. These remarks do not apply to related types such as the Hayes point which has a distinctive diamond-shaped pointed stem, or the flared fan-shaped stemmed point which at present remains unnamed. Examples B and I are ideal examples of the type.

Source of Plate Illustrations

All drawings were made from the original specimens in the University of Oklahoma collections at Norman, Oklahoma. The catalog numbers are as follows:

A - LfCr-1 B189-3c Craig mound, Burial 189	G - Ck-6/789 Harlan site
B - LfCr-1 B189-3f Craig mound, Burial 189	H - Ck-6/247 Harlan site
C - LfCr-1 B189-3a Craig mound, Burial 189	I - Ck-6/227 Harlan site
D - LfCr-1 B189-12 Craig mound, Burial 189	J - Ck-6/254 Harlan site
E - Ck-6/254 Harlan site	K - LfCr-1 B32-2 Craig mound, Burial 32
F - Ck-6/254 Harlan site	L - LfCr-1 B189-3d Craig mound, Burial 189

ALBA



BASSETT POINTS

The Bassett point has been referred to by Clarence H. Webb (1948, p. 132) as the "Bassett Pointed Stem" in his discussion of the Bossier Focus. The type is now called simply the Bassett point.

Description

This type is a small arrow point characterized by a very short, pointed stem. Webb (1948) describes the point as follows: "a keen, small point with straight sides, acutely barbed shoulders and short pointed stems".

Suhm and Krieger (1954, p. 494) describe the Bassett point as follows: "Very small triangular blades with edges usually straight, sometimes slightly convex or concave. Occasionally, tip is slimmed down to needle sharpness. Tiny pointed stem is about equal in size to the two barbs; when barbs are rather long, stem is like a tiny protrusion in middle of a deeply concave base. Very thin and finely chipped artifacts with exceedingly fine edge serration common."

The length ranges from about $3/4$ to $1\frac{1}{2}$ inches with many specimens averaging about 1 inch.

Distribution

Suhm and Krieger (1954) list the Bassett point as being found in the northeast corner of Texas and the adjacent portions of Louisiana and Arkansas. Its occurrence in Oklahoma is not well established.

Age and Cultural Affiliation

The estimated age given by Suhm and Krieger (1954) is from about 1200 to 1500 or 1600 A. D.

The type is found chiefly in sites representing the Fulton Aspect and is a common point in the Belcher and Texarkana Foci.

Remarks

Some specimens of other types which have a broken stem might be confused with the Bassett point without careful examination of the base. The stems on Bassett points, however, are intentionally made as a tiny pointed stem. Specimen D represents an ideal example of the type.

Source of Plate Illustrations

All drawings were made from specimens found in Louisiana and furnished by Clarence H. Webb of Shreveport, Louisiana. The catalog numbers are as follows:

A, D, F and H - 797	E - 1014 C-13
B, G and I - C-13	J - 998
C - C-13/2b	K - C-13/PT

BASSETT



A



B



C



D



E



F



G



H



I



J



K

CARROLLTON POINTS

The Carrollton point has been identified by Crook and Harris (1954) who described it as Carrollton Stemmed.

Description

The Carrollton point is a small to medium sized point characterized by a fairly long rectangular shaped stem which is commonly ground on the sides and/or base. Crook and Harris (1954) describe it as "semi-triangular headed, long-stemmed, square based." Suhm and Krieger (1954, p. 406) describe the type as follows: "Triangular blade with prominent shoulders, squared or barbed; blade edges straight to slightly convex. Stem roughly rectangular, base straight to slightly convex. Stem edges, and sometimes base, commonly smoothed." The length ranges from $1\frac{1}{4}$ inches to $2\frac{1}{4}$ inches but some of the shorter examples may have been resharpened. The stem is usually $\frac{1}{3}$ to $\frac{1}{2}$ of the total length. Workmanship is apt to be crude and irregular with fairly large flake scars on the surface.

Distribution

The Carrollton point is found primarily in the Dallas, Texas area along the East Fork and Trinity River. It occurs in diminishing numbers toward northeast Texas and northward into the Red River drainage. Specimens are found in southern Oklahoma along Red River in the Lake Texoma area and eastward.

Age and Cultural Affiliation

The Carrollton point is found along the terraces of the Trinity River in the upper levels of the Albritton clays. On the basis of studies at the Wheeler site, Crook (1952) has suggested an antiquity of about 1500 B. C. Present information suggests that the Carrollton type was made from about 2000 B. C. to 1000 B. C.

The type is a common point in the Carrollton Focus of the Trinity Aspect, Archaic stage. Suhm and Krieger (1954) also list it as a minor type in East Texas Aspect of the Archaic period. They also note a relationship to Bulverde points of the Edwards Plateau Aspect but the Carrollton point has "much less variation in form, especially barbs, workmanship generally crude, stems not wedge-shaped in longitudinal section, and Bulverde type lacks smoothing of stem edges and base."

Remarks:

Mr. Harris considers examples A and B as representing ideal examples of the type.

Source of Plate Illustrations

Specimens A through I are in the collection of Mr. R. K. Harris of Dallas, Texas, and were found at various sites in the vicinity of Dallas. Specimens J through L are in the collection of Mr. James Mayfield of Norman, Oklahoma, and were collected in Marshall County, Oklahoma. The catalog numbers or site locations are as follows:

A - 392/De6 Lake Dallas site	G - 27A5-12 Wood Pit site
B - 27A5-12 Wood Pit site	H - 27A5-12 Wood Pit site
C - 27A5-12 Wood Pit site	I - 27B7-3 Melaun site
D - 27A6-13 Obschner site	J - Ma-3
E - 27A1-18	K - Ma-3
F - 27D2-1 Edwards site	L - Ma-3

CARROLLTON



A



B



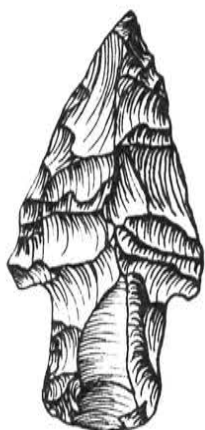
C



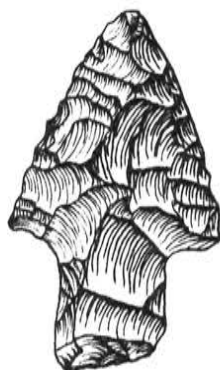
D



E



F



G



H



I



J



K



L

CATAN POINTS

The Catan point has been named by R. S. MacNeish and described by Suhm and Krieger (1954, p. 410).

Description

The Catan type is a small leaf-shaped dart point similar to the Abasolo point in all characteristics except size. Catan has a triangular to leaf-shaped blade, the edges being most commonly convex. The base is convex or well rounded to semicircular. The blade is usually beveled on one or both edges on both faces of the blade, giving a fairly thick and heavy cross-section.

In size the type ranges from about 3/4 to 1 3/4 inches in length.

Suhm and Krieger (1954) note that "in dimensions they could be classed as arrow points, but in thickness and use of bevels they are like other dart points."

Distribution

The Catan point is found from southern Tamaulipas, Mexico to the central Gulf coast of Texas and inland over southwest Texas (Suhm and Krieger, 1954). The type also occurs in Oklahoma and elsewhere.

Age and Cultural Affiliation

According to Suhm and Krieger (1954) the type "may have first appeared about 500 A.D. and survived until the 18th century."

In Texas, the Catan point is found in the Mier, Brownsville, and Rockport Foci. In Tamaulipas and on the Texas coast, Catan points are found in association with pottery.

Remarks

The type is found in association with the Matamoros type, and resembles the Matamoros point except for the rounded base; Matamoros has a straight or slightly curved base. The larger examples of Catan would be indistinguishable from small sized Abasolo points. Specimen E represents a type example.

Source of Plate Illustrations

The drawings were made from the original Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 78-B9-8	G - 78-B2-7
B - 78-B2-1	H - 15-13-39
C - 15-68-37-b	I - 78-B2-1
D - 78-B8-1	J - 78-B2-5
E - 78-B2-1	K - 78-B9-8
F - 78-B2-1	

CATAN



A



B



C



D



E



F



G



H



I



J



K

CLOVIS POINTS

The Clovis point has been named from types found associated with extinct animal remains near Clovis, New Mexico.

Description

The Clovis point is often confused with the Folsom point because of the fluting on the face of the blade. In general, the Clovis point is larger in size, less skillfully made, and the flutes are shorter in length. The base and the sides of the base have been ground as in the Folsom point, but the concave base is more shallow and the point tapered rather than rounded.

Wormington (1957, p. 263) describes it as follows: "Fluted lanceolate points with parallel or slightly convex sides and concave bases. They range in length from one and a half to five inches, but are usually some three inches or more in length and fairly heavy. The flutes sometimes extend almost the full length of the point but usually they extend no more than halfway from the base to the tip. Normally, one face will have a longer flute than the other. The fluting was generally produced by the removal of multiple flakes. In most instances the edges of the basal portion show evidence of smoothing by grinding."

Distribution and Association

The Clovis point has a wide distribution throughout North America. Suhm and Krieger (1954, p. 412) note the type from the "Borax Lake site in northern California and Naco site in southern Arizona across United States to Atlantic seaboard; a few specimens from Alaska, Durango, Mexico and Costa Rica."

The Clovis point has been found in association with the extinct mammoth at several localities: Angus, Nebraska; Dent, Colorado; the Miami and McLean sites in Texas; Clovis, New Mexico, and the Naco and Lechner sites in Arizona (Wormington, 1957). The vast majority of Clovis points, however, have been found on the surface, unassociated with cultural or faunal remains. The type is found occasionally in Oklahoma.

Age and Cultural Affiliation

The Clovis type is known to be older than Folsom as a result of work done by the Texas Memorial Museum near Clovis, New Mexico (Sellards, 1952). Suhm and Krieger, (1954) suggest an age "Somewhat greater than that of Folsom points, probably at least 10,000 B. C. and perhaps as early as 15,000 B. C. at beginning."

There are some radiocarbon dates available, but they are not in agreement. The Lewisville site in Texas (Crook and Harris, 1957) has produced two dates of more than 37,000 years ago for hearths associated with a Clovis point. Charcoal from the Naco mammoth find in Arizona gives a radiocarbon assay of 9250 ± 300 years ago (Wise and Shutler, 1958). This seems like an unreasonable length of time for a single type to exist; until additional dates become available the matter will remain uncertain.

The Clovis type is one of the early Paleo-Indian hunting points. It has been assigned to the Llano complex by Sellards (1952).

Remarks

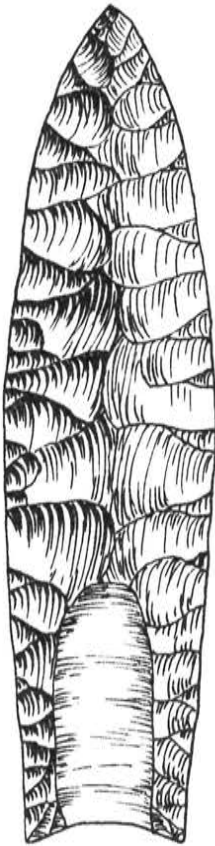
Specimen F may be used as an ideal example.

Source of Plate Illustrations

The illustrations were made from published drawings or photographs as follows:

- A - Howard, 1935, Plate 37, Figure 1 (Texas)
- B - Sellards, 1952, p. 35, Figure 17a (Blackwater No. 1, N. M.)
- C - Wormington, 1949, p. 39, Figure 9 (Dent, Colorado)
- D - Sellards, 1952, p. 26, Figure 9a (Miami, Texas)
- E - Sellards, 1952, p. 25, Figure 8b' (Miami, Texas)
- F - Sellards, 1952, p. 43, Figure 22A (Naco, Arizona)

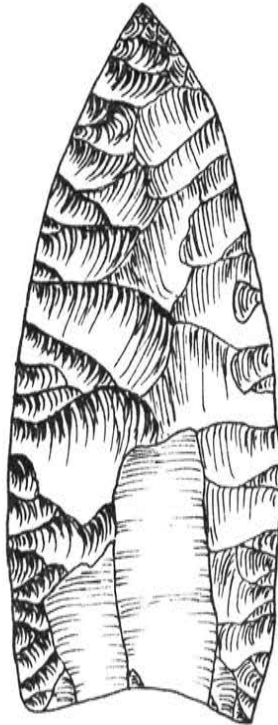
CLOVIS



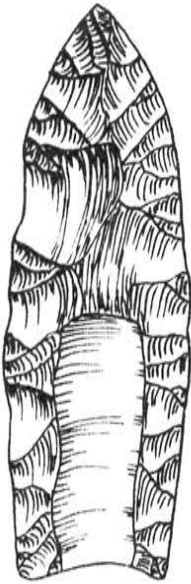
A



B



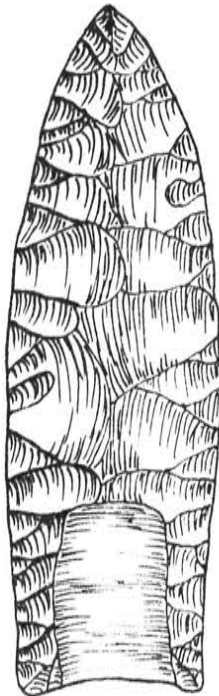
C



D



E



F

DALTON POINTS

The Dalton point has been named from distinctive types representing the Dalton culture of central Missouri. The Dalton culture and hence the Dalton point have been named in honor of Judge S. P. Dalton of Jefferson City, Missouri who first furnished information regarding this early lithic culture (Chapman 1948, p. 138).

Description

The Dalton point is an early dart point which is quite distinctive. Although it is not essentially a stemmed point, a stem or basal section is clearly marked off from the blade, either by grinding or a change in outline. The blade is triangular in outline, usually with straight or very slightly convex or concave edges. The stem or basal section is roughly parallel-sided, frequently slightly concave along the edge and terminated by a deeply concave base. The concave base is thinned by one or more relatively large flake scars on both faces. The sides of the base are ground or smoothed and this may extend across the concave base. The blade is well flaked to produce serrations, often forming a coarse saw-like edge. The blade, moreover, may be slightly or strongly beveled although strong bevels are more likely to occur on what appears to be resharpened specimens. In size the Dalton point ranges from perhaps 1½ inches to 3 inches with most examples falling between 2 and 2½ inches in length.

Distribution

The Dalton point appears to be most common in an area centering within Missouri although specimens are found widespread within the Mississippi basin. Examples are found in Oklahoma but are not common anywhere in the state.

Age and Cultural Affiliation

The Dalton point has been found in the lowest levels at Graham Cave in Missouri where radiocarbon dates suggest an antiquity from 6000 to 8000 B. C. Although the type certainly lasted for a considerable period of time beyond that date, it does represent one of the early type points. An estimated time span would be from perhaps 8000 or 6000 B. C. up to perhaps 3000 B. C.

The type is a common type in the Dalton culture of Missouri. Elsewhere it is associated with a general Archaic assemblage.

Remarks

The Dalton point closely resembles the Meserve type in shape, size and workmanship. The Dalton point is normally serrated and may lack beveling; the Meserve point is usually strongly beveled and lacks pronounced serrations. Figures A and B can be considered as ideal examples of the type.

Source of Plate Illustrations

Drawings A and B were made from illustrations furnished by Carl Chapman, Department of Anthropology, University of Missouri, Columbia, Missouri. Drawings C through I were made from the original specimens. Figures D through H were drawn from examples furnished by Tom Gilcrease of Tulsa, Oklahoma. The specimens are as follows:

- A - Dalton site, Missouri
- B - Lowest level at Graham Cave, Mo.
- C - #1125 Union County, Illinois
- D through I - Arkansas

DALTON



A



B



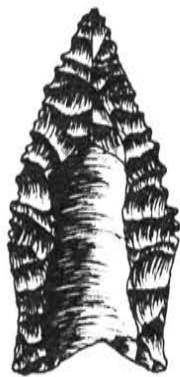
C



D



E



F



G



H



I

EDGEWOOD POINTS

The Edgewood point has been named by Suhm and Krieger (1954, p. 418) from types found in Texas.

Description

This type is a relatively small point having an expanding stem with a concave base. Suhm and Krieger (1954) describe the Edgewood point as follows: "Short triangular blade with edges sometimes straight, usually convex. Blade occasionally beveled on right edge of both faces. Shoulders prominent to well barbed. Stem edges expand widely with base often as wide as shoulders. Base may be nearly straight but is usually concave."

In size the Edgewood point ranges from about $1\frac{1}{4}$ to 2 inches with most examples averaging about $1\frac{1}{2}$ inches in length.

Distribution

Suhm and Krieger (1954) list the Edgewood type as being found "principally in northeast Texas, and sporadically from there toward Central and North-Central Texas, perhaps toward coastal plain." The type is found in Oklahoma and elsewhere in the Mississippi valley.

Age and Cultural Affiliation

The age of this type is not clearly established although Suhm and Krieger (1954) suggest that it is a late Archaic type "appearing shortly before or after the time of Christ."

The cultural associations are not well known; in Texas it occurs in the East Texas Aspect and the Edwards Plateau Aspect. In Oklahoma it appears before Gibson Aspect times.

Remarks

The Edgewood point is perhaps best illustrated by Figures A, C, D, G and I. It closely resembles the Ellis point in size and proportions and differs mainly in the concave base.

Source of Plate Illustrations

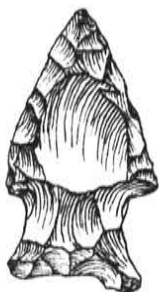
All drawings were made from the actual specimens found in Texas. Figures A through G are from the R. K. Harris collection at Dallas, Texas, and Figures H through J are in the University of Texas collections at Austin. The catalog numbers are as follows:

A - 27A5-12	Wood Pit site	F - 27A6-13
B - 27A9-7	Cottonwood site	G - 27B7-3
C - 27D2-1	Edwards site	H - 5-24-5058-c
D - 27A9-7	Cottonwood site	I - 4-2-1452-b
E - 27A9-18	Chamness site	J - 5-25-1788

EDGEWOOD



A



B



C



D



E



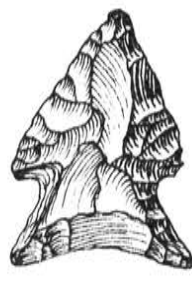
F



G



H



I



J

EVA POINTS

The Eva point has been named by Lewis and Kneberg (1947, p. 18) and was originally called the Eva Double Base Notch. A description of the Eva point was later given by Lewis (1955, p. 69) and Kneberg (1956, pp. 24-25).

Description

The Eva point is a medium to large sized dart point characterized by two notches cut in from the base. Kneberg (1956, pp. 24-25) describes the type as follows: "The basic shape is trianguloid, and the side edges are usually recurvate, but tend to be straight in the late examples. The base is straight. The blade is flat and relatively thin. Percussion chipping predominates, although some pressure retouching is shown. The two notches, which are perpendicular to the base, were precisely made by percussion. One blow on each face was usually sufficient to produce a notch. On some examples, the chip removed to make the notch ended in a hinge fracture; the technique of removing this chip was apparently similar to that used in fluting. The edges of the notches were seldom retouched. The barbs resulting from the notching are blunt, since they are the remaining corner portions of the original trianguloid blade. The short, straight stem is the remaining mid-portion of the trianguloid blade. The size is usually large, rarely medium. The proportions tend to be broad, particularly in the medium sized examples."

Distribution

Kneberg (1956) reports that the Eva point is seldom found outside the western half of Tennessee.

Age and Cultural Affiliation

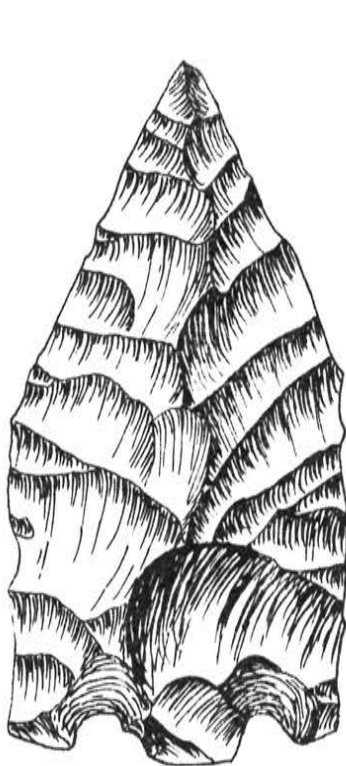
The Eva point was apparently used over a long period of time from about 5000 B.C. up to about 1000 B. C., although it is rare after 3000 B. C. (Kneberg, 1956).

The type is named from the Eva site in Benton County, Tennessee, and represents a common point in the Eva Focus of the Archaic period.

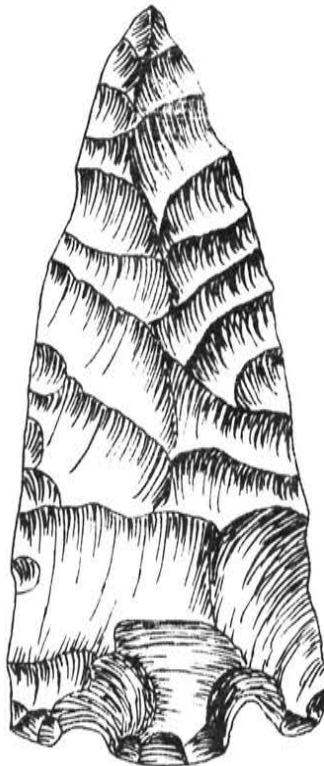
Source of Plate Illustrations

The illustrations were made from drawings furnished by T. M. N. Lewis, Department of Anthropology, University of Tennessee, Knoxville, Tennessee. All examples are from Eva Focus sites in Tennessee.

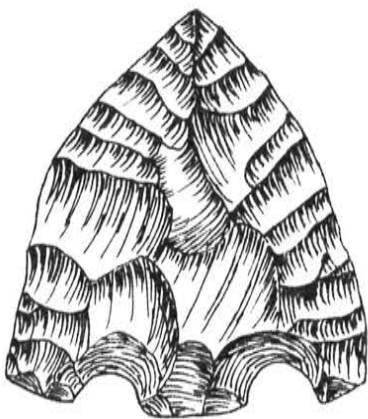
EVA



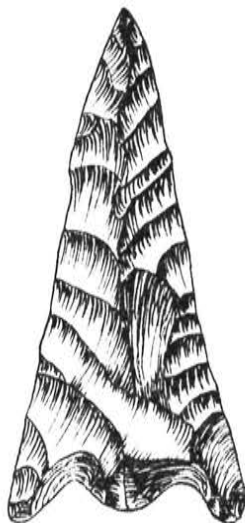
A



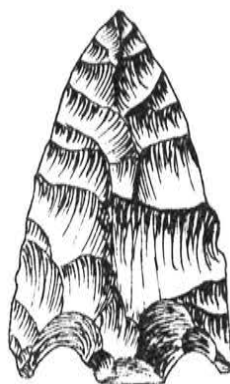
B



C



D



E

EVANS POINTS

The Evans projectile point type has been named by Ford and Webb (1956, p. 64) from limited examples found at the Poverty Point site in Louisiana. Additional information will be forthcoming when Webb and Gregory publish on the Sanson site near Catahoula Lake, Rapides Parish, Louisiana.

Description

The Evans projectile point is especially characterized by a pair of single notches which have been cut into the blade edge slightly below the shoulder. The stem exhibits considerable variation ranging from a squared or rectangular stem with a straight or convex base, to an expanding or bulbous stem having either a straight or convex base.

Ford and Webb (1956, p. 64) describe the Evans point as follows:

"The specimens from Poverty Point have triangular blades with convex edges and well defined square shoulders. Three stems expand slightly towards the base; the fourth contracts slightly. The distinguishing feature of this type is the second set of notches worked into the blade edges a short distance above the shoulders. These notches are smaller than the corner notches, and the edges have not been blunted but remain rather sharp.

"The primary chipping on these points is fairly good, resulting in rather thin blades, lenticular in cross-section. Blade edges have been straightened and sharpened by irregular delicate retouching.

"Too few specimens are available to give complete size range. The smallest specimen is 5 cm. long, 3.1 cm. wide, and 6 mm. thick. Two other specimens have about the same size and proportions. The largest measures 9.8 cm. long, 3.7 cm. wide, and 7 mm. thick.

"Three of the points are made of tan chert, the fourth is of black chert."

Distribution

The Evans point is found throughout the northern half of Louisiana, the adjacent portions of east Texas, southern Arkansas and western Mississippi. Although the general area of distribution is not very well known, the type appears most abundant in northern Louisiana. I do not recall specific examples from Oklahoma, but they could well occur in the southeastern section of the state.

Age and Cultural Affiliation

The age and cultural association of the Evans point is not established at present. The appearance of the type at Poverty Point, however, suggests that it has a considerable antiquity. Upon the basis of radiocarbon dates for Poverty Point and the Jaketown site, another example of the same complex, Ford and Webb (1956, p. 124) suggest an occupation from around 800 B. C. to 600 B. C. The association of the Evans point with pottery at other sites in Louisiana, however, suggests that this point was still made until a more recent date. Until more information is available, the age and cultural affiliations of the Evans type remain uncertain.

Source of Plate Illustrations

All specimens shown in the illustrations are from the Dr. Clarence Webb collection at Shreveport, Louisiana. All examples are shown actual size.

Specimen A and B, Bossier Parish, La.; C and H, Sinner site, Bossier Parish, La.; D, F, G, and J, Sanson site, Rapides Parish, La.; E, Pease site, Bossier Parish, La.; I, Caddo Lake site, Caddo Parish, La.; K, Mooringsport #1 site, Caddo Parish, La.

EVANS



A



B



C



D



E



F



G



H



I



J



K

FOLSOM POINTS

The Folsom point has been named from discoveries made near Folsom, New Mexico in 1926. At the Folsom site a distinctive type of projectile point was found in association with the bones of extinct bison. This discovery marked a turning point in the recognition of man's antiquity in the New World.

Description

The Folsom point is characterized by the shape, workmanship and the flute or groove which extends along the faces of the blade. The flutes have normally been removed from both sides and extend almost to the tip, producing a thin cross-section. The points have a concave base with basal grinding which extends about one-third the length of the point. Although some Folsom points have parallel sides, the widest portion of the blade is most commonly toward the tip. The workmanship is excellent with fine delicate chipping along the blade.

Figgins (1934) describes the Folsom point as follows: "The best Folsom types have wide spalls removed from the sides, beginning at the base and sometimes extending quite to the tip, producing a hollowed or fluted effect. The bases are concave, often to a depth of a quarter of an inch or more and thus forming ear-like backward projections. In practically all cases Folsom artifacts are widest forward of a point midway of their length, and their width sometimes equals, or exceeds, half of their length."

Frank Roberts (1934) of the Smithsonian Institution offers the following by way of description: "A true Folsom specimen is a thin leaf-shaped blade. The tip is slightly rounded and the broadest part of the blade tends to occur between the tip and a line across the center of the face. A typical feature is a long groove extending along each face about two-thirds of the length, which produced lateral ridges paralleling the edges of the blade. A cross-section of the object should give a bi-concave appearance. The base is concave, often with long sharp base points. There normally is a more or less fine marginal retouching, a secondary removal of small flakes between the edges and the lateral ridge of the central groove. Another feature frequently observed is that of smoothed edges around the base and extending along the edges for about one-third the length of the blade. The usual material from which such objects were made was jasper, chert or chalcedony. Some of the finest chipping of stone ever seen on New World specimens is to be found on the Folsom points."

Distribution and Association

The Folsom point is found chiefly in western North America throughout the High Plains, extending from Texas in the south to Alberta and Saskatchewan in the north. Some of the better known discoveries are Folsom, Blackwater Draw and Sandia Cave sites in New Mexico; the Lubbock, Lipscomb, Scharbauer and Kincaid sites in Texas; the Lindenmeier, Linger and Powars sites in Colorado, and the MacHaffie site in Montana. Surface specimens are known from a number of other localities (Wormington, 1957).

Specimens from Oklahoma are reported from the Nall site (Baker, Campbell and Evans, 1957), Caddo county (Bell, 1954), and Marshall county (Bell, 1957).

The Folsom point has been associated at several sites with the remains of an extinct bison, *Bison taylori*.

Age and Cultural Affiliation

The Folsom point represents one of the earliest projectile points associated with the Paleo-Indian hunters of western United States. Radiocarbon dates for burned bison bone from the Lubbock site in Texas are 9883 plus or minus 350 years ago (Libby, 1952). Current evidence indicates a date of around 8000 B. C. for the Folsom point.

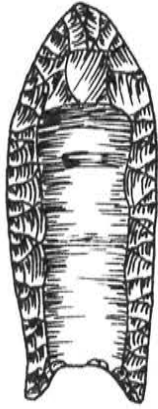
Remarks

The Folsom point is well known but frequently not correctly identified. Very often any fluted point is classified as a Folsom point in spite of the fact that other types also exhibit fluting. Size and workmanship are especially important criteria. Folsom points are frequently reworked, especially by repointing a broken specimen to produce a shorter example. The study of original type-specimens will aid considerably in proper identification of the Folsom point. Specimen B represents an ideal example.

Source of plate illustrations

All drawings have been made from photographs as follows: A) Texas, (Howard, 1935, Plate 30, No. 5); B) Folsom site, (Howard, 1935, Plate 33); C) Clovis, New Mexico, (Howard, 1935, Plate 35, No. 2); D) Lindenmeier site, (Roberts, 1936, Plate 4); E) Lubbock site, (Sellards, 1952, Fig. 24a); F) Kincaid site, Texas, (Sellards, 1952, Fig. 44a'); G) Sandia Cave, (Hibben, 1941, Plate 6, Fig. a); H) Lindenmeier site, (Roberts, 1936, Plate 4); I) Kincaid site, Texas, (Sellards, 1952, Fig. 44c'); J) Lindenmeier site, (Roberts, 1936, Plate 4); K) Lindenmeier site, (Roberts, 1936, Plate 4).

FOLSOM



A



B



C



D



E



F



G



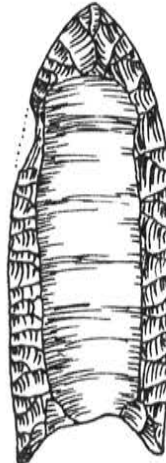
H



I



J



K

GARY POINTS

The Gary point has been named by Newell and Krieger (1949, p. 164-165) from types found in Texas. It was formerly called the "Gary Contracting Stem" point.

Description

This type is represented by a dart point which has a contracting stem, the taper extending toward the base to terminate in a pointed or rounded end. Suhm and Krieger (1954, p. 430) describe the Gary point as follows: "Triangular blade with edges usually straight to convex but sometimes concave or recurved. Shoulders may be small but usually flare out widely almost at right angles; barbs, if present at all, are short. Stems usually contract strongly to pointed or somewhat rounded base but may at times approach being parallel sided."

In size the Gary point ranges from about 1½ to 3 inches with occasional specimens being either shorter or longer. Suhm and Krieger (1954) note that the stem length is more consistent than the length of the blade; on short specimens the stem is almost ½ of the total length, on longer specimens about 1/4 to 1/3 of the total length.

Distribution

The Gary point is widespread throughout the Mississippi basin and the eastern United States. It is a particularly common type in the states of Oklahoma, Arkansas, Louisiana and Mississippi.

Age and Cultural Affiliation

The Gary type appears to have lasted for a long time period. Suhm and Krieger (1954) suggest an antiquity from perhaps 2000 B. C. up to 1000 A. D. and possibly in some areas as late as 1500 or 1600 A. D.

The type appears in the Archaic period and is certainly also associated with some later pottery making cultures. It is common throughout the Caddoan area and is most frequent on pre-Gibson Aspect sites.

Remarks

There is a considerable range in variation within the Gary type, and further study may eventually necessitate a break-down into separate types (Baerreis, Freeman and Wright, 1958). There are also some hints to suggest that the Gary point becomes smaller in size in more recent times (Ford and Webb, 1956).

The Gary point resembles the Wells type in stem form; the Wells type, however, is narrower in proportion to length and has a relatively longer stem which is well smoothed along the edges.

Source of Plate Illustrations

All of the drawings were made from specimens found at the Morris site, Ck-39, in Cherokee County, eastern Oklahoma, and are now in the University of Oklahoma Stovall Museum collections. The catalog numbers are as follows:

A - Ck-39/405	G - Ck-39/148
B - Ck-39/644	H - Ck-39/278
C - Ck-39/633	I - Ck-39/421
D - Ck-39/98	J - Ck-39/202
E - Ck-39/146	K - Ck-39/751
F - Ck-39/614	L - Ck-39/747

GARY



A



B



C



D



E



F



G



H



I



J



K



L

HARRELL POINTS

The name Harrell has been applied to a small side notched triangular arrowpoint by Suhm and Krieger (1954, p. 500) who recognize two sub-types or sub-groups: one has a notch in the base while the other does not. In order to differentiate these two sub-groups, I suggest that the name Harrell be applied to those having a basal notch, and that the term Washita point be applied to those without the basal notch. The Washita point is described elsewhere in this publication.

Description

The Harrell point is a triangular arrowpoint having edges which are nearly straight or slightly convex. The bases are usually straight but may be concave. Two small side notches occur, one on each side, from $\frac{1}{4}$ to $\frac{1}{2}$ the distance from the base toward the tip. A third notch occurs in the base.

In size most specimens range from about $\frac{1}{2}$ or $\frac{5}{8}$ of an inch to 1 and $\frac{1}{8}$ or 1 $\frac{1}{4}$ inches, with most examples falling around 1 inch long.

Distribution

The Harrell point is widely distributed throughout the country. Suhm and Krieger (1954) list it as occurring in Texas "across the northern parts, extending southward to the upper Brazos and Trinity River drainages, with occasional specimens farther south. Unknown in East Texas except for rare, probably intrusive specimens. Also of general distribution in Great Plains from northern Texas to Canada, east to Mississippi valley, and west to the Southwest, always associated with agriculture and pottery-making. In far western states and Northwest, occurs in late horizons without agriculture or pottery."

The type is well represented throughout Oklahoma although it is most abundant in the central and western parts of the state.

Age and Cultural Affiliation

Suhm and Krieger (1954) suggest an age ranging from about 1100 to 1500 A. D. although they suggest it may be older in some localities outside of Texas. It is generally associated with the late prehistoric cultures here in Oklahoma but does not appear to last until historic times. In Texas it is associated with the Antelope Creek, Henrietta and Wylie Foci. In Oklahoma the Harrell point is most common in the Washita River, Custer and Optima Foci.

Remarks

The Harrell point is similar to, if not identical with, the Cahokia point of the Mississippi valley. Specimens A and O are ideal examples of the type.

Source of Plate Illustrations

All of the drawings were made from the original specimens. Figures A, B, C, D, E, F, I and K are from the J. B. Skeen collection, Carnegie, Oklahoma. Figures H, N, O, P, Q, R, S, T and U are from the Elmer Craft collection, Eldorado, Oklahoma. Figures G, J, L and M are from the University of Oklahoma collections. The examples are all from Oklahoma:

A and B - Caddo county	M - Gd-1, Grady county
C, D and E - Greer county	N - Hr-1, Harmon county
F, I and K - Washita county	O - Ki-2, Kiowa county
G - Wa-3/4, Washita county	P and V - Bk-2, Beckham county
H, Q and T - Ki-3, Kiowa county	R and S - Gr-9, Greer county
J and L - Gv-4, Garvin county	

HARRELL



A



B



C



D



E



F



G



H



I



J



K



L



M



N



O



P



Q



R



S



T



U

HAYES POINTS

The Hayes point has been described by Newell and Krieger (1949) as a Gibson Aspect arrowhead.

Description

The type is a small, carefully chipped arrow point recognized chiefly by the characteristically diamond shaped stem. Suhm and Krieger (1954, p. 502) describe the Hayes point as follows: "Slender triangular blade with edges usually concave or recurved, occasionally straight, rarely convex. Some are square-shouldered without real barbs, but others have barbs sweeping out laterally rather than pointing downward. Stems are bulb-shaped in some cases, but are often featured by a diamond shape from which tiny protrusions emerge on one or more edges. Blade edges sometimes finely serrated, and tips may be sharply incut."

Most specimens range between 1 or $1\frac{1}{4}$ and 2 inches in length.

Distribution

The type appears to be most common in the great bend of Red River in the Caddoan area. Examples are found in the adjacent states of Oklahoma, Arkansas, Louisiana and Texas. Within Oklahoma, the Hayes type appears to be limited to the eastern portion of the state.

Age and Cultural Affiliation

Suhm and Krieger (1954) suggest an age from possibly 800 A. D. to 1200 A. D. for the Hayes point. They also consider it as "characteristic only of the Haley Focus in Gibson Aspect, but may occur as minor type or intrusion in late phases of Alto, Gahagan and Spiro Foci." Hayes points are found on some Gibson sites in Oklahoma and are certainly representative of the Gibson Aspect.

Remarks

The Hayes point is very much like the Alba point except for the stem. The Alba has a rounded base while the Hayes type has a pointed or diamond shaped base. Figure B is an ideal example of the Hayes point.

Source of Plate Illustrations

All drawings were made from the original specimens furnished by Mr. Tom Gilcrease of Tulsa, Oklahoma. They were found in Mound B at the Crenshaw Place, Arkansas. The catalog numbers are as follows:

A, B, C, D, E, F, G, and H - H-385 Northeast part of Mound B
I and J - H-387 Mound B

HAYES



A



B



C



D



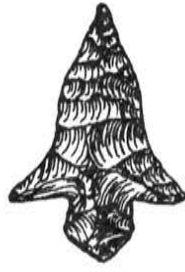
E



F



G



H



I



J

KINNEY POINTS

The Kinney point has been named by Suhm and Krieger (1954, p. 434) from specimens found in Texas.

Description

Suhm and Krieger (1954) describe the Kinney point as follows: "Triangular to leaf-shaped blade, edges almost straight in some cases but usually convex. On longer and narrower specimens the edges may be almost parallel for some distance forward from base. In rare cases, lower edges are smoothed and specimen may be confused with Plain-view points. Bases always concave, from slightly to deeply, usually in single broad arc but occasionally in recurve."

"It is quite possible that longest and broadest specimens (or even all of them) are knives rather than projectile points, but there seems to be no feasible way to distinguish them. It seems possible that at least some of the 'Kinney points' were used as projectile points, particularly those which are of symmetrical outline with thinned, concave bases, and these grade imperceptibly into larger and heavier specimens which are probably knives."

In size the Kinney point ranges from 1 3/4 inches to 4 1/2 inches with most examples falling between 2 and 3 inches.

Distribution

Suhm and Krieger (1954) report the type as most frequent from the central coast inland across Texas northwestward and west as far as the Pecos River mouth.

Age and Cultural Affiliation

Suhm and Krieger (1954) assign the Kinney point to the Archaic period with an estimated date ranging from 1000 or 2000 B. C. up to 1000 A. D. It is found in the Edwards Plateau Aspect, the Aransas Focus, Pecos River Focus and Falcon Focus.

Remarks

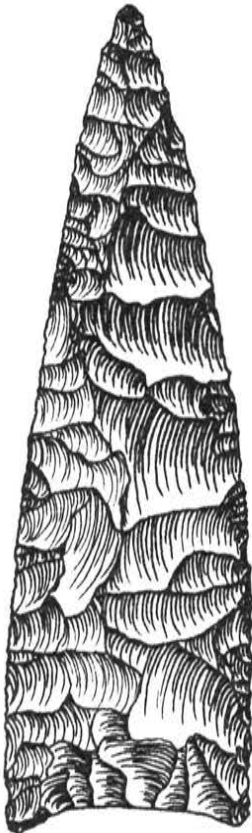
The Kinney points are similar in shape and distribution to Tortugas points but are larger on the whole, lacking the beveling and grade from triangular to leaf-shape (Suhm and Krieger, 1954). They also resemble the Pandora and Refugio points in some respects; however, the Pandora point has a straight base, the Refugio point a convex base; the Kinney point has a concave base. This form is found in Oklahoma and elsewhere but the cultural associations are not clearly known. Specimen C is a typical specimen.

Source of Plate Illustrations

The drawings were made from the original specimens found in Texas and furnished by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 7-2-1511b	F - 5-6-1126-a
B - 7-1-1230-a	G - 7-1-1295-a
C - 15-30-83b	H - 5-13-3843
D - 15-30-75b	I - F. Bell 898
E - 5-2-551-i	

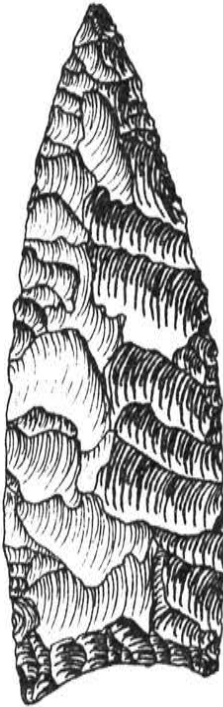
KINNEY



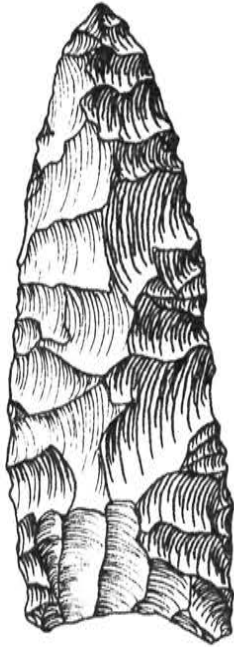
A



B



C



D



E



F



G



H



I

LANGE POINTS

The Lange point has been named by Suhm and Krieger (1954, p. 436) from types found in Texas.

Description

The Lange point is a medium to large sized dart point having a slightly expanding stem and well defined shoulders. Suhm and Krieger (1954) describe the type as follows: "Large triangular blade with edges straight to convex, occasionally concave or recurved. Shoulders prominent and often well barbed. Stem edges expand and are often straight, resembling those of Castroville type but not as wide. Base almost always straight but may be slightly concave or convex."

In length, the size ranges from about 2 inches to $3\frac{1}{2}$ inches. The stem forms perhaps $\frac{1}{5}$ to $\frac{1}{3}$ of the total length.

Distribution

The Lange point is common in central Texas and is found with decreasing frequency as one progresses into eastern Texas, toward the central coast and northwest into the plains. (Suhm and Krieger, 1954). The type is also found in many parts of Oklahoma, but it is most abundant in the eastern sections of the state.

Age and Cultural Affiliation

This type appears fairly early and apparently lasted for a long period of time. Suhm and Krieger (1954) suggest an antiquity from about 4000 B. C. up to 1000 A. D.

In Texas, the Lange point is a common type in the Edwards Plateau Aspect. It is also found in the East Texas Aspect and the coastal Aransas Focus. Within Oklahoma the type appears chiefly in the early Archaic horizons such as the Fourche Maline Focus.

Remarks

Suhm and Krieger (1954) note a similarity between the Lange and Castroville points. In the Lange point, however, "the stems are generally less wide, the long and massive barbs which align with the base are absent, the bases are usually straight rather than convex," and the blades are more variable. Specimen E represents a typical example.

Source of Plate Illustrations

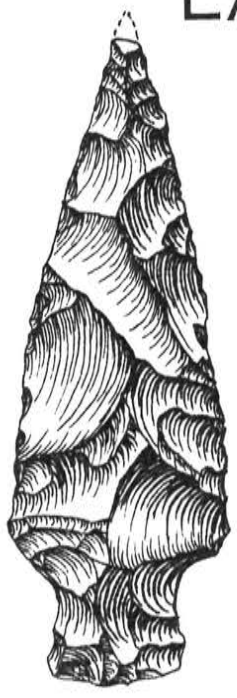
All drawings were made from Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 5-24-5061-q	G - 5-24-5004-b
B - 5-24-5222-b	H - 5-24-5004-F
C - 5-14-3912-R	I - 5-24-5219-0
D - 5-14-3930-b	J - 5-14-3907-L
E - 59-2756-b	K - 5-24-5080-P
F - 5-24-5203-6	

LANGE



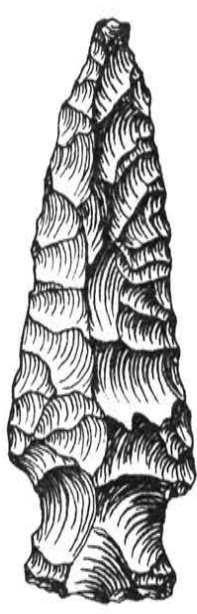
A



B



C



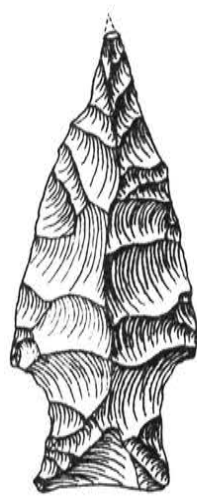
D



E



F



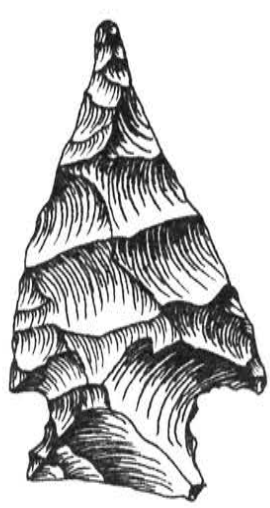
G



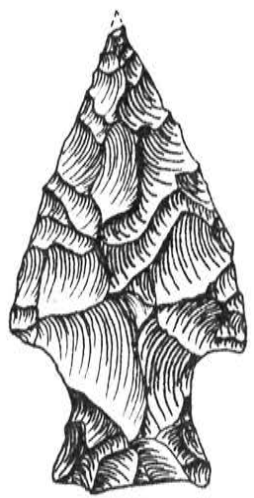
H



I



J



K

LANGTRY POINTS

The Langtry point has been named by J. Charles Kelley (Kelley, Campbell and Lehmer, 1940), and described by Suhm and Krieger (1954).

Description

The Langtry point is characterized by a tapered stem which terminates in a straight or concave base. The shoulders are prominent, and the blade is generally triangular in outline. The average size is around 2 or 2½ inches in length.

Suhm and Krieger (1954, p. 438) describe the Langtry type as follows: "Triangular blade with edges straight to concave or recurved, seldom convex, which is unique among Texas dart point types. Usually exceedingly thin and finely chipped, even the largest ones. Shoulders prominent to widely outflaring, often uneven; barbs may sweep widely outward. Stems long, contracting, at times nearly parallel-edged or even expanding slightly. Bases are usually concave, even when stem contracts strongly, but may be straight or (rarely) convex."

Distribution

According to Suhm and Krieger (1954, p. 438) the type "apparently centered in Pecos River-Rio Grande confluence area, extending over adjacent parts of Trans-Pecos Texas and northern Coahuila in the general Big Bend Area, and southeastward down Nueces and Rio Grande valleys about as far as McMullen and Starr Counties, respectively. Also occurs in Tamaulipas panhandle next to Rio Grande valley."

Bell and Hall (1953, p. 5) reported the Langtry point as fairly common throughout Oklahoma, particularly in the eastern part of the state. Suhm and Krieger (1954, p. 438) question this identification and suggest an improper recognition of the type. Points of a similar type, however, are found on Oklahoma sites and examples are illustrated in Hall's report on the Smullen's site, Ck-44 (Hall, 1954, Plate 13, Figs. 18, 19 and 20). Rather than to consider this as a separate type with another name because of its occurrence in Oklahoma, it was included as an example of the Langtry point.

Age and Cultural Affiliation

Kelley (1947a) considers the Pecos River Focus which contains the Langtry point as terminating sometime around 1000 or 1100 A. D., certainly prior to 1300 A. D. Suhm and Krieger (1954) give an estimated age for the Langtry point as from an unknown time before Christ to 700 or 800 A. D. Within Oklahoma, the type is usually found on non-pottery sites in association with types considered as Archaic, suggesting an age of at least 2000 years.

Kelley (1947a) reports the Langtry point as a common type in the Pecos River Focus. Suhm and Krieger (1954) consider it as a minor type in the Falcon Focus, and as appearing occasionally in the Edwards Plateau Aspect of central Texas. In Texas, it appears to be found chiefly in the southwestern section of the state.

Remarks:

Specimen C is a typical example of the type.

Source of Plate Illustrations

All drawings were made from actual specimens supplied by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. All examples are labeled F. Bell plus the catalog number, and are now in the University of Texas collections.

A) #1267, B) #1749, C) #1104, D) #1152, E) #1107, F) #1099, G) #1153, H) #726.

LANGTRY



A



B



C



D



E



F



G



H

LERMA POINTS

The Lerma point has been named by R. S. MacNeish and described by Suhm and Krieger (1954, p. 440).

Description

The Lerma point is a slender, double-pointed leaf-shaped blade which could serve as a projectile point or as a knife. Suhm and Krieger (1954) describe it as follows: "Usually long, slender, double-pointed leaf-shaped blade, although one end may be somewhat more rounded than pointed, and a few specimens are rather broad. It is not thought that all are projectile points, for the broader ones, at least, may be double-pointed knives. However, for the most part their thickness and steep edges make them unsuitable for knives and their symmetry suggests the balance needed for projectile points. They are thickest in the middle and thinned down enough at one end to be hafted." In size, the Lerma point ranges from about 2 inches to 4 inches in length with the majority of specimens falling between 2 and 3 inches.

Distribution

The type is found in the western part of central Texas as far as the Pecos River mouth, southward throughout the Rio Grande valley in both south Texas and northern Mexico, and eastward to the central Texas coast (Suhm and Krieger, 1954). As to whether Lerma points occur in Oklahoma or not remains uncertain. Similar forms are found but usually in a context which suggests a knife rather than a projectile point.

Age and Cultural Affiliation

The Lerma type apparently lasted over a long period of time. Suhm and Krieger (1954) suggest that it "Possibly appeared earliest in southern Tamaulipas (Mexico), several thousand years before Christian era; in Texas from well before the time of Christ to somewhat after."

In Texas, the Lerma point is found as a minor type in the Edwards Plateau Aspect, the Pecos River Focus, and the Aransas Focus. These all represent an Archaic period (Suhm and Krieger, 1954).

Remarks

Figures A, B and G are typical examples.

Source of Plate Illustrations

All specimens illustrated were furnished by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 7-1-1197E
B - 5-6-2189
C - 7-1-1107
D - 4-1-57b

E - 7-1-1256-c
F - 7-1-1256-d
G - 7-1-1112-c
H - 7-1-1112-e

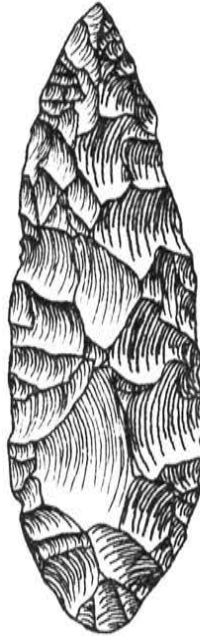
LERMA



A



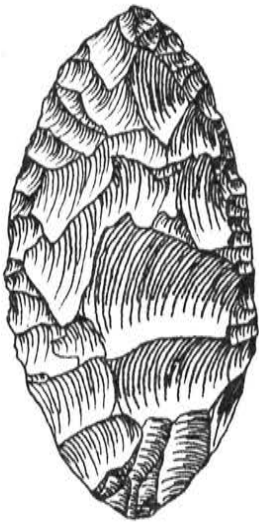
B



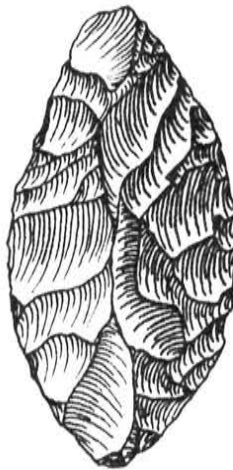
C



D



E



F



G



H

MARCOS POINTS

The Marcos point has been named by Suhm and Krieger (1954, p. 442) from types found in central Texas.

Description

This type is basically a corner notched, expanding stemmed dart point. Suhm and Krieger (1954) describe the type as follows: "Generally broad triangular blade with edges straight, slightly convex, or gently recurved. Always barbed because deep notches cut into corners at about 45 degree angle; barb tips frequently in line with base. Angle of notches also makes stem strongly expanding; bases straight to convex, rarely slightly concave, generally not as wide as barbs."

The Marcos point ranges from 1 3/4 to 4 inches in length, the average specimen being about 2 or 2 1/4 inches long.

Distribution

In Texas the type is found approximately from the lower Pecos River valley across central Texas to the middle Brazos River. Also it is found from Upper Brazos area southward to the central coast (Suhm and Krieger, 1954). The type occurs in Oklahoma, particularly in the eastern section of the state.

Age and Cultural Affiliation

Suhm and Krieger (1954) suggest an estimated age from possibly 2000 B. C. up to 1000 A. D.

In Texas, the Marcos point occurs as a minor type in the Edwards Plateau Aspect and the Pecos River Focus, both representing the Archaic period. In Oklahoma, the type is not clearly associated with a specific assemblage although it does not appear to be linked with either Gibson or Fulton Aspect materials.

Remarks

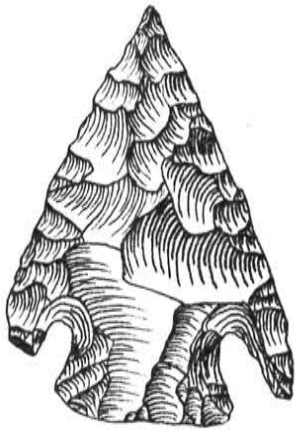
Suhm and Krieger (1954) point out a general similarity between Marcos and Ensor; the Marcos point, however, has deeper notches, a narrower stem neck in proportion to blade width, and is generally wider with longer barbs. The type also resembles Castroville, but in the Marcos the stems are not as broad across the neck and they expand more sharply. In addition, the notches are cut inward from the corner rather than upward from the base, and the occasionally massive squared barbs of the Castroville type are absent. Figure C can be used as a typical example of the Marcos type.

Source of Plate Illustrations

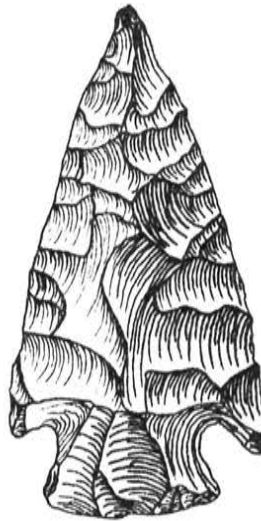
All of the drawings were made from the original Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 5-24-5170-d	F - 5-24-4969-F
B - 5-24-5163-d	G - 5-24-5026-F
C - 5-24-4970-h	H - 5-24-4970-b
D - 5-24-4970-a	I - 1c-33-9b
E - 5-24-4971-c	

MARCOS



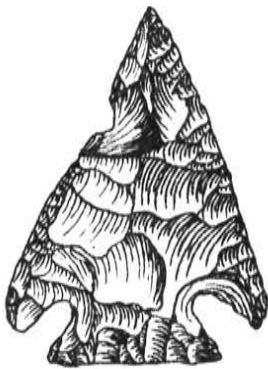
A



B



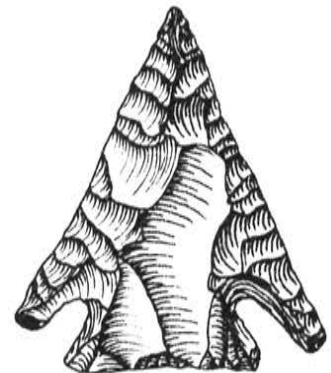
C



E



F



G



H



I



J

MARSHALL POINTS

The Marshall point has been named by Suhm and Krieger (1954, p. 444). Some of the Marshall points were probably included in types called Smithwick Small Stem and Bluffton Barbed by J. Charles Kelley. (Suhm and Krieger, 1954).

Description

This type is a fairly large dart point manufactured from an oval shaped blade; the stem is formed by cutting the notches in from the base producing prominent barbs. Suhm and Krieger (1954) describe the Marshall point as follows: "Blade varies from triangular to broad oval, edges from nearly straight to greater part of a semi-circle. Shoulders always strongly barbed; the more massive barbs commonly being in line with the base. Notches may have removed most of the corner but usually cut upward into the blade from the base. Stem may be parallel-sided or slightly expanded, and is often quite short in proportion to the massive blade. Base straight or slightly concave or convex."

In length this type ranges from about 2 inches to 4½ inches with examples falling between 2½ and 3 inches being most common.

Distribution

Suhm and Krieger (1954) list the Marshall point as common only in Central Texas, but as occurring occasionally in North Central Texas. The type is found in Oklahoma and elsewhere.

Age and Cultural Affiliation

This appears to be an early type and is commonly associated with the Archaic manifestations. Suhm and Kreiger (1954) give an estimated date ranging from 3000 or 4000 B. C. up to 1000 A. D.

Throughout Texas the Marshall point is chiefly associated with the Edwards Plateau Aspect in central Texas. It is commonly found with Pedernales points. For Oklahoma, the type appears to be represented in the Archaic period sites of the eastern section of the state.

Remarks

Typical examples are Figures A, B and E. The broad blade, heavy barbs and short stem aid in identifying the type.

Source of Plate Illustrations

The drawings were made from Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 5-6-1525	E - 5-13-3553-g
B - 5-13-3551-f	F - 5-13-3576-a
C - 5-24-5038-c	G - 5-24-5039
D - 5-24-5169	H - 5-13-3551-m

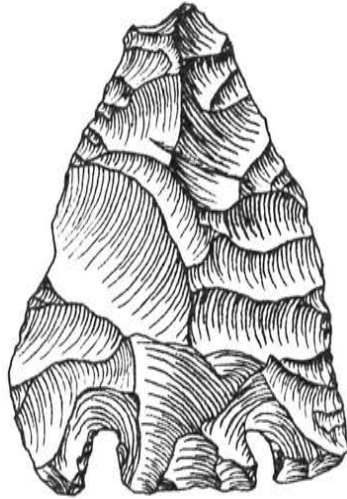
The rain is falling outside
my window. It's a soft rain,
one of peace. A soft wind
falls with every drop. The
sweet smell that goes along
with the rain, can make you
feel all the emotion in your
heart and soul. The tears
that are to lightning to let
go, lightning that someone
would see. The love you
long for, but seems always
out of your reach. Out
of your control.

But, like the rain, we
keep coming back, now more
pain. But all of ways seem
to hold the pain, as the rain
hides the sun or moon, as it
will not hide the wounds.

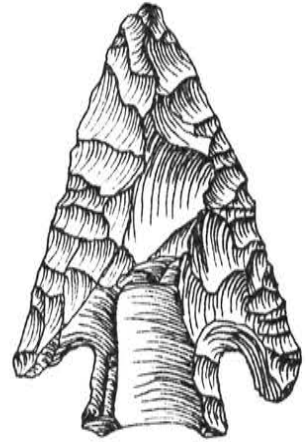
MARSHALL



A



B



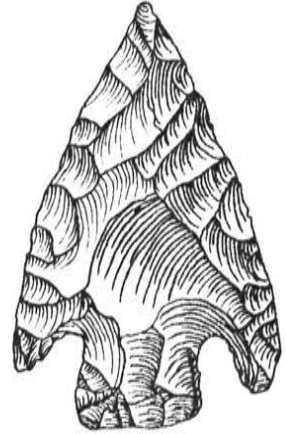
C



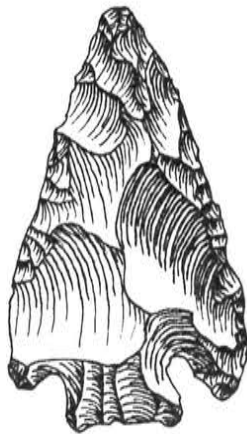
D



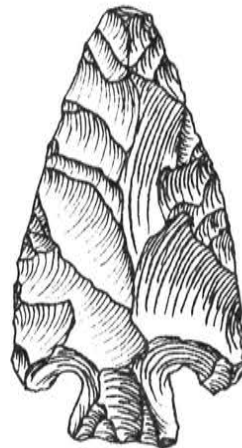
E



F



G



H

MATAMOROS POINTS

The Matamoros point has been named by R. S. MacNeish from types found in Tamaulipas, Mexico (Suhm and Krieger, 1954, p. 448).

Description

The Matamoros point resembles the Tortugas point in all characteristics except size, the Matamoros point being smaller in size. The point is basically triangular in outline. The blade edges are usually straight, convex or slightly concave. The bases are usually straight, slightly convex or slightly concave. A thinning of the base is common. The type is usually beveled on the right or left edge of both faces, occasionally on both edges.

In size the type ranges from about $\frac{3}{4}$ to $1\frac{1}{2}$ inches in length. The larger examples overlap with the smaller sized Tortugas points.

Distribution

Suhm and Krieger (1954) list the Matamoros type as extending from southern Tamaulipas to the coastal Gulf coast of Texas and inland across south Texas toward the southwest. The type is represented in Oklahoma collections.

Age and Cultural Affiliation

The Matamoros type is believed to have first appeared about 500 A. D. and to have survived until historic times (Suhm and Krieger, 1954). In Texas the type is found in the Mier, Brownsville, and Rockport Foci. In some areas it appears both with and without pottery.

Remarks

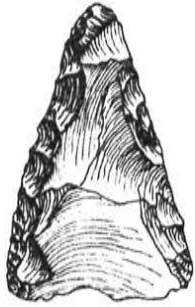
The type is small and would be classed as an arrow point except that the thickness and beveling suggest its use as a dart point. Specimen B is a typical example.

Source of Plate Illustrations

The drawings were all made from Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 7209-13/432B	E - 78895
B - 7209-13/118M	F - 7209-13/264M
C - 7209-13/433B	G - 78-89-5
D - 7209-13/434B	H - 7209-13/52M

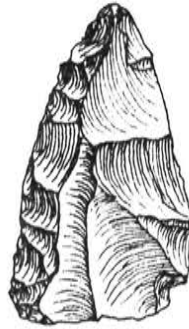
MATAMOROS



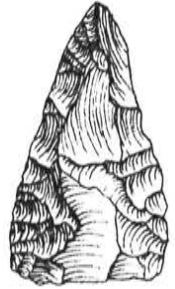
A



B



C



D



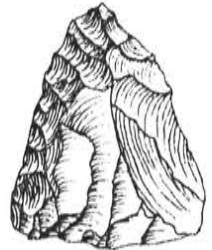
E



F



G



H

MAUD POINTS

The Maud point has been named by Suhm and Krieger (1954, p. 504).

Description

This type is a plain triangular arrow point characterized chiefly by the deep concave or V-shaped base. Suhm and Krieger (1954) describe the Maud type as follows: "Slender triangular points with edges usually straight, sometimes recurved with constriction near middle. Bases deeply concave to deeply V-shaped. Commonly very finely chipped, thin, flat, with edges minutely serrated."

In length, the Maud point ranges from about $\frac{3}{4}$ of an inch to 2 inches. The width is remarkably uniform, falling around $\frac{1}{2}$ to $\frac{5}{8}$ of an inch.

Distribution

The Maud point is found throughout most of the Caddoan area, the northeast part of Texas, northern Louisiana, southern Arkansas and eastern Oklahoma. For Oklahoma it is perhaps most abundant in the southeastern portion of the state.

Age and Cultural Affiliation

Suhm and Krieger (1954) give an estimated age for the Maud type as lasting from 1200 to 1500 A. D.

Throughout the Caddoan area it is found in the Texarkana, Belcher, Titus and McCurtain Foci, all of the Fulton Aspect.

Remarks

This type has a wider distribution than the Caddoan area and is normally associated with pottery and agriculture. The Hamilton point (Lewis, 1955) is very similar in some examples, although it is more likely to have concave edges along the blade.

The Maud type is frequently found in caches associated with burials and may possibly represent special burial offerings. A typical example is shown in Figure C.

Source of Plate Illustrations

The drawings were made from specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. All specimens are labeled with the name T. B. Caldwell and a catalog number. The numbers are as follows:

A, D, E and I - T-5
B - T8-163
C - T8-164

F, H and J - T-10
G - T-4

MAUD



A



B



C



D



E



F



G



H



I



J

McKEAN POINTS

The McKean lanceolate point has been named and described by Richard Page Wheeler on the basis of samples from sites in the Keyhole Reservoir in northeastern Wyoming (Wheeler, 1952).

Description

The McKean point is essentially a lanceolate shaped point having a notched or concave base. Wheeler (1952) describes the type as follows:

"Generally, the sides of the blade are incurved toward the tip and tapered toward the base about midway between the tip and the base; less commonly, the sides of the blade are parallel, and are tapered toward the tip and incurved near the base, or the sides of the blade are tapered toward the tip and are incurved near the base; rarely, the sides of the blade are incurved toward the tip and toward the base. The base has a deep, usually symmetrical notch; or less commonly a shallow, usually symmetrical notch.

"The basal notch was apparently produced by removing one flake or several flakes from each face in the direction of the tip. The lateral projections are usually thinned bifacially and are rounded, pointed or irregular in outline; they are rarely of the same length and breadth. The edge of the notch is thin and sharp.

"Moderately well controlled pressure flaking. Usually both faces of the blade are fully flaked; but in some cases, one face of the blade is fully flaked and the opposite face is retouched along the edges only. In every instance the edges of the blade are thin, slightly sinuous, and somewhat uneven. There is no evidence of edge-smoothing or grinding."

Distribution

The McKean point has been found in northeastern Wyoming, south-central and eastern Montana, southwestern South Dakota and western Nebraska (Wheeler, 1952). Points of this type, however, are found over a considerably larger area including much of western United States. Examples are to be seen occasionally in collections found in Oklahoma, particularly those from the western sections of the state.

Age and Cultural Affiliation

On the basis of radiocarbon dates from the lower levels at Signal Butte, Nebraska, Wheeler (1952) suggests an antiquity of 3500 to 4000 years ago for the McKean point. Other radiocarbon dates for sites in the Angostura basin, South Dakota, where charcoal was found along with three McKean points, are 3630 ± 350 and 4230 ± 350 years ago (Crane, 1956). This is quite in agreement with the dates from Signal Butte and suggests that the McKean point was in use around 2000 B. C.

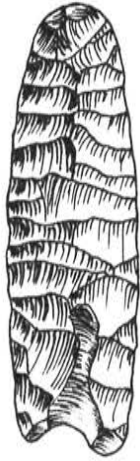
The cultural affiliations of the McKean point are not as yet established.

Source of Plate Illustrations

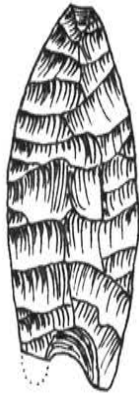
The drawings are taken from Wheeler's illustrations in the Plains Archaeological Conference Newsletter (1952). All examples are from sites in the Keyhole Reservoir, eastern Wyoming. The catalog numbers are as follows:

A - 48CK204-620	F - 48CK204-580
B - 48CK7-24	G - 48CK4-45
C - 48CK7-23	H - 48CK7-26
D - 48CK204-587	I - 48CK7-10
E - 48CK204-529	

McKEAN



A



B



C



D



E



F



G



H



I

MESERVE POINTS

The Meserve point has been named by E. Mott Davis (Bell and Hall, 1952, pp. 6-7) from specimens found at the Meserve bone quarry near Grand Island, Nebraska, the Red Smoke site in the Medicine Creek Reservoir, Nebraska, and the Gibson site near Abilene, Texas.

Description

The Meserve type description was furnished by Davis and presented by Bell and Hall (1952) as follows: "Meserve points are like Plainview points in width, thickness, style of flaking, basal outline, and basal grinding. They are unlike Plainview points in length, general outline, and secondary treatment of tip edges and basal concavity. Many of them appear to be reworked Plainview points."

"Outline: Blade edges straight, tapering, sometimes serrated; they extend back beyond midpoint and make an angle with basal edges. Blade edges sometimes inset from basal edges. Basal edges straight or slightly concave, roughly parallel. Base concave."

"Secondary treatment: Blade edges unifacially beveled, bevel being on right edge as either face is viewed with tip forward. Beveling produces rhomboidal cross-section near the tip. Unifacial beveling may or may not extend back to include basal edges. Basal edges may be retouched bifacially. Basal concavity bifacially beveled by removal of vertical flakes; sometimes one of these flakes is long, creating a short flute. Concavity and basal edges usually ground smooth."

In size the type ranges in length from about $1\frac{1}{4}$ to $2\frac{1}{2}$ inches, most examples being about 2 inches long.

Distribution

The Meserve point is found primarily throughout the Great Plains area from Texas to Canada and eastward from the Rocky Mountains to the Mississippi River. Although rare, it is most frequent throughout the High Plains area. Examples are represented throughout Oklahoma.

Age and Cultural Affiliation

The type was found in association with Plainview types at the Red Smoke site in Nebraska (Davis, 1953), and it appears to be of equal antiquity. An estimated age would range from perhaps 7000 B. C. up to 3000 or 2000 B. C. The cultural identification is not well established.

Remarks

Examples of the Meserve type are often found as occasional artifacts on Archaic or even pottery bearing sites. Such specimens apparently represent re-used points which were picked up and used again by different Indians.

The Meserve point closely resembles the Dalton type; the Meserve, however, has a pronounced bevel, is less apt to be serrated, and although basally thinned, is not as likely to appear fluted. Specimen F may be used as a typical example of the type.

Source of Plate Illustrations

All drawings were made from the original specimens. Figures A, B and E are from the University of Oklahoma collections; figures C, D, F and I were furnished by Tom Gilcrease of Tulsa, Oklahoma, and figures G and H were furnished by E. Mott Davis, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - Mc-0/6	McCurtain County, Oklahoma	F - No data
B - Mc-0/7	" " " "	G - W. Mitchell #23
C - No data		H - 5-10-2852
D - No data		I - S-1041 Nevada County, Arkansas
E - GTW #1002		

MESERVE



A



B



C



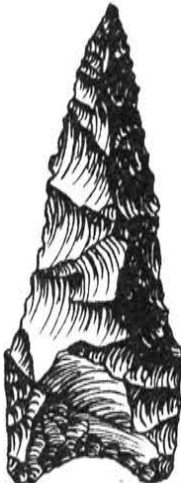
D



E



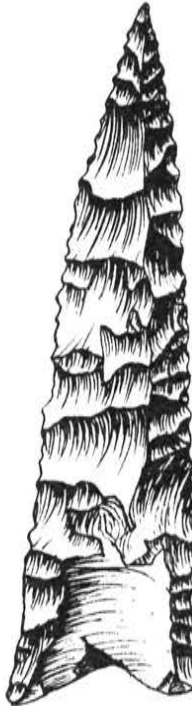
F



G



H



I

MILNESAND POINTS

The Milnesand point has been named by E. H. Sellards from specimens discovered at the Milnesand locality in New Mexico (Sellards, 1955, pp. 336-344).

Description

The Milnesand point is a lanceolate dart point. Sellards (1955) describes the type as follows: "The projectile points are of sturdy construction, thin at the edges and thickening to a more or less pronounced median ridge or keel. Thinning of the edges has been secured by approximately transverse flaking from either edge. In some instances the central ridge is more pronounced on one side of the point than on the other. The base is thinned by the removal of numerous small flakes from each side, resulting in a wedge-like, prevailingly square base. At the tip the flaking, with some thinning on both sides, forms a sharp point. The base and sides of all the projectile points are smoothed by grinding, the smoothed margin extending often $\frac{1}{2}$ or more of the length of the point."

Wormington (1957, p. 265) describes the Milnesand point as follows: "Points which resemble Plainviews but that have straight or very slightly convex or concave bases. More and smaller flakes were removed in thinning the base, resulting in a beveled appearance. Basal grinding goes farther up the sides than on most Plainviews, often extending more than half the length of the point. Flaking is of the transverse parallel type, but some specimens have fairly pronounced median ridges. The general range in length is between one and a half and three inches. Most points are between two and three inches long."

Distribution and Association

The Milnesand point is found in eastern New Mexico and western Texas. The type is apparently found throughout the high plains in western United States and elsewhere. Wormington (1957) notes examples from Nebraska, Iowa, Alberta, Saskatchewan and Alaska. Examples have also been found in western Oklahoma.

At the Milnesand site, the points were found in association with numerous bison bones. It is not certain, however, as to whether or not an extinct form of bison is represented.

Age and Cultural Affiliation

Sellards (1955) correlates the Milnesand deposit with the Portales complex at Blackwater Draw which overlies the Folsom horizon, suggesting a post-Folsom date. The similarities between Milnesand and Plainview suggest contemporaneity of the two types. Utilizing radio-carbon dates from the Plainview site (Wormington, 1957, p. 108), an age of from 7000 B. C. to 5000 B. C. is suggested for the Milnesand point.

The type represents one of the early Paleo-Indian hunter groups, and is closely related to the Portales complex of west Texas.

Remarks

The Milnesand point resembles the Plainview point and may be confused with it without careful consideration. Sellards (1955, p. 343) notes "The most conspicuous difference between Plainview and Milnesand points is the prevailingly concave base of the former and the prevailingly square base of the latter. Both the Plainview and the Milnesand points are thinned at the base by flakes removed from both sides, some before and some after the side flaking had been done. They present, however, one notable difference. Plainview man usually secured a thinned base by striking off a few, 1 to 5 or 6, relatively large flakes, some 10 to 18 mm. in length. The Milnesand point makers habitually thinned the base by taking off numerous small flakes, from 5 or 6 to 8 or 9. The result is that the base of the Milnesand point terminates much more abruptly and is more distinctly wedge shaped and is stronger than is the base of the Plainview point."

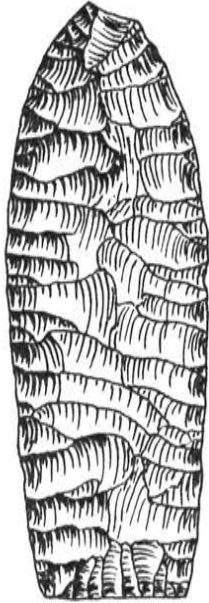
Source of Plate Illustrations

All illustrations are taken from Sellards (1955) and represent specimens from the Milnesand site in New Mexico.

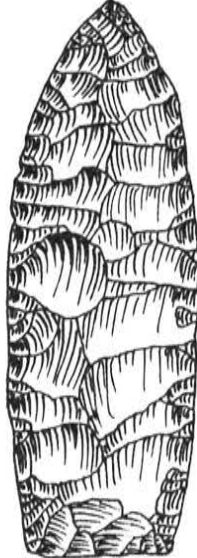
A - Fig. 98, b'
B - Fig. 99, d
C - Fig. 99, b'

D - Fig. 98, a
E - Fig. 99, a
F - Fig. 100, a

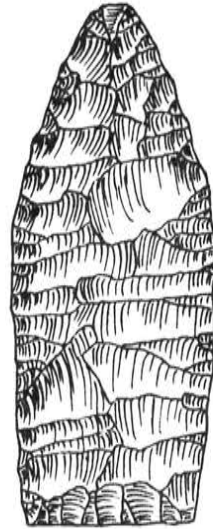
MILNESAND



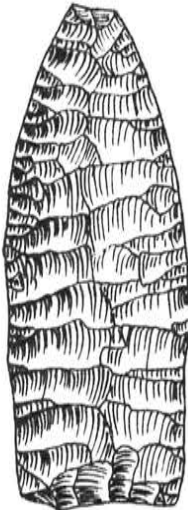
A



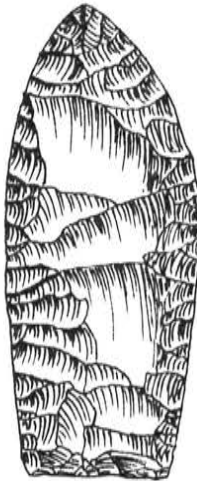
B



C



D



E



F

MONTELL POINTS

The Montell point has been named by Suhm and Krieger (1954) although it has been recognized as a distinct type by workers in Texas archaeology for sometime.

Description

The Montell point is a stemmed dart point characterized by a bifurcated stem. The bifurcated stem is the most distinctive feature of the Montell point. The relatively short stem has been divided into two sections by a deep notch cut from the base. Suhm and Krieger (1954, p. 452) describe the type as follows: "Triangular blade with edges sometimes straight but also commonly convex, concave, or recurved. Shoulders sometimes squared but more often have barbs from small to large, sometimes aligned with base. Stem occasionally parallel-edged but usually expands and is split in center with a deep V-shaped notch. The notch may occasionally be somewhat rounded but this clear bifurcation of the stem is an easily recognizable feature. The base itself was almost always strongly convex before the notch was made."

In size the average Montell point is about 2½ inches long with a range from 1½ to 4 inches.

Some examples are very well made and exhibit thin cross-sections in spite of their width. Other examples often display fairly large flake scars and average workmanship.

Distribution

According to Suhm and Krieger (1954, p. 452) the Montell point is found throughout central Texas and westward to the Pecos River mouth, possibly into the Big Bend area. The type is certainly rare in Oklahoma although one example is reported from the Morris site in Cherokee County (Bell and Dale, 1953, p. 113, Figure 11, No. 28).

Age and Cultural Affiliation

The exact age of the Montell point is uncertain although it is most certainly to be associated with the Archaic horizons in central Texas. Suhm and Krieger (1954) suggest a possible age of 2000 to 3000 B. C. up to 500 or 1000 A. D.

In Texas the type is associated with the Edwards Plateau Aspect and the Pecos River Focus (Suhm and Krieger, 1954). Kelley (1947) considers this type as diagnostic of the Uvalde Focus.

The meager evidence from Oklahoma does not aid in establishing the age of this type since the single specimen from the Morris site cannot be assigned to a specific component. Specimen D represents a type example.

Source of Plate Illustrations

All drawings were made from actual specimens furnished by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The examples are from various localities in Texas, and the originals are now in the University of Texas collections. The catalog numbers are as follows:

A - 5-14-3931-d	D - 5-14-3931-k	G - 5-14-3931-l	J - 5-14-3931-q
B - 5-14-3931-e	E - 5-14-3931-c	H - 5-14-3931-a	K - 5-14-3931-g
C - 5-14-3931-h	F - 5-14-3932-d	I - 5-14-4098-a	L - 5-14-3932-E

MONTELL



A



B



C



D



E



F



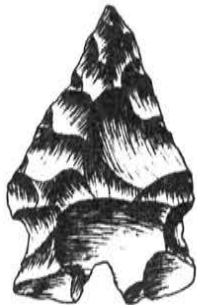
G



H



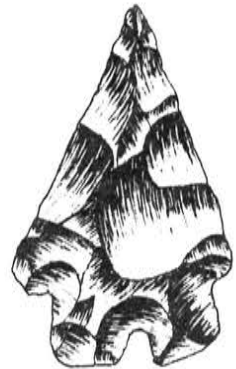
I



J



K



L

MORHISS POINTS

The Morhiss point has been named by Suhm and Krieger (1954, p. 454) from the Morhiss site in Victoria County, Texas. It is apparently the same type as that called Garcetas Broad Base by Kelley (1947 p. 104).

Description

The Morhiss type is a fairly heavy stemmed dart point having a broad but somewhat rounded base. Suhm and Krieger (1954) describe the type as follows: "Triangular blade with edges almost always convex. Shoulders generally small, from hardly visible to right-angular. Barbs, if present, very small. Stem parallel-edged with convex base. In general, stem very broad and rounded with blade not greatly wider."

The size ranges from about 2 inches to $3\frac{1}{2}$ inches with most specimens averaging around $2\frac{1}{2}$ to 3 inches.

Distribution

In Texas the Morhiss point is a minor type associated with specimens characteristic of Central Texas and the Coastal area (Suhm and Krieger, 1954). The type is found in Oklahoma as well as elsewhere in the Mississippi valley.

Age and Cultural Affiliation

Suhm and Krieger (1954) suggest an age ranging from possibly 2000 B. C. up to 1000 A. D. The type tends to be associated with the Archaic periods.

Remarks

Specimens B, E and G are perhaps typical examples of the Morhiss type. It resembles the Adena type of the Ohio valley in some of its characteristics.

Source of Plate Illustrations

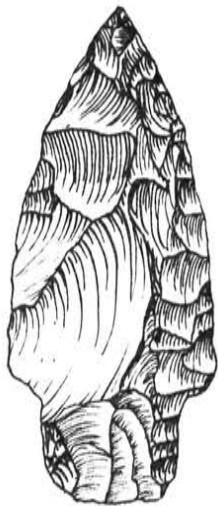
All drawings were made from the original specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 7-1-1097	E - 7-1-1100
B - 7-1-1099-d	F - 7-1-1099-a
C - 7-1-1105-d	G - 7-1-1099-b
D - 7-1-1157-c	H - 7-1-1157-b

MORHISS



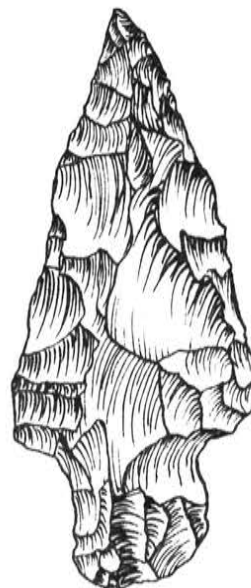
A



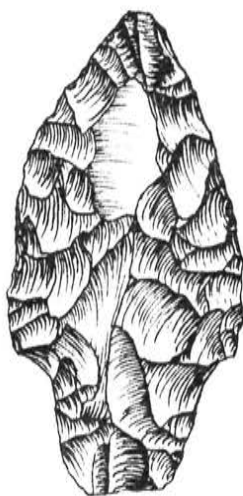
B



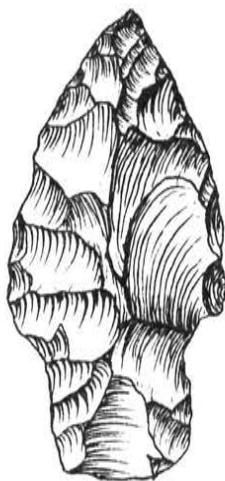
C



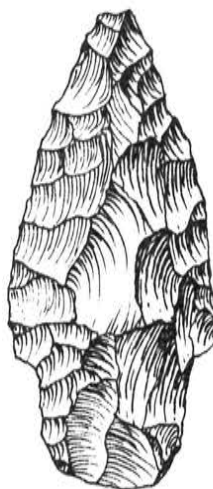
D



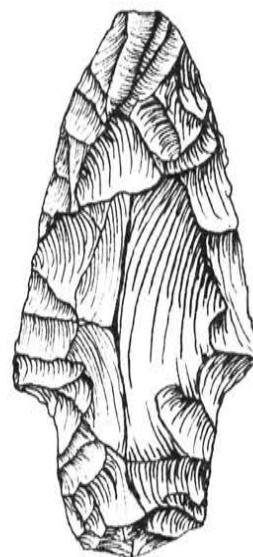
E



F



G



H

MORRIS POINTS

The Morris point has been named by Bell and Hall (1953). The name is taken from the Morris site (Ck-39) in eastern Oklahoma where several examples of this distinctive type were found (Bell and Dale, 1953).

Description

The Morris point is an arrow point characterized by the distinctive base. It is basically a side notched point having a third notch or indentation in the base. The two ears or projections formed by the basal notch are rounded and carefully chipped. The notching presents a wide U-shaped notch; all three notches are approximately the same size. The blade is usually straight but may be slightly convex on some examples. The blade edges are carefully chipped, and many specimens have delicate serrations. The length ranges from about 3/4 of an inch up to 1 3/4 inches with the average size falling around 1 inch in length.

Distribution

The distribution of the Morris point is not known although it has been found at several excavated sites in eastern Oklahoma. Examples have been found at the Morris, Horton, Spiro, Eufaula, Brackett and other sites in east central Oklahoma. The type appears to be found along the Arkansas River and its tributaries in eastern Oklahoma, perhaps also extends into the adjacent areas of Kansas, Missouri and Arkansas.

Age and Cultural Affiliation

The Morris point is well represented in Gibson Aspect sites although it apparently lasted until the transition from Gibson to Fulton or until early Fulton Aspect times. An estimated age would range from around 800 A. D. up to 1400 A. D.

Source of Plate Illustrations

All examples illustrated are from the Spiro mound, Cr-1, in Le Flore County, Oklahoma. The specimens are in the collections of the University of Oklahoma, Norman, Oklahoma. The catalog numbers are as follows:

A - A27-1i	G - Burial #31
B - Burial #31	H - A-25
C - A27-1m	I - Burial #31
D - A 27-1k	J - A-25
E - Burial 140-8a	K - A-25
F - A27-1b	L - Burial #31

MORRIS



A



B



C



D



E



F



G



H



I



J



K



L

MOTLEY POINTS

The Motley point has been named by Haag (Ford, Phillips, and Haag, 1955, pp. 129-130) from the Motley Place in northeastern Louisiana.

Description

Haag (Ford, Phillips, & Haag, 1955) describes the type as follows: "Large triangular, corner-notched, gently convex sides, well executed blade. Notching is quite variable, but always pronounced or fairly deep; generally a rounded corner, rather than an oblique notch, is removed. Barbs are present, but never very pronounced. The stem always expands towards the base which is generally flat, though occasionally slightly convex. Apparently pressure chipped, though large flakes are most frequently seen. These are always bifacial. Despite large flaking, a neat, well-executed appearance is a constant feature."

Ford and Webb (1956, p. 57) described Motley points from Poverty Point as follows: "The triangular blades with straight or slightly curving edges are moderately wide at the shoulders; they are rather deeply corner-notched so that the blades are definitely barbed and the stems expand. The stem bases are about equally divided between straight and moderately convex."

In size, the type ranges from about 2 inches to 4½ inches in length, with the majority of examples falling between 2½ and 3 inches.

Distribution

The Motley point is found as a common form in northeastern Louisiana and the immediate vicinity. Haag (Ford, Phillips, & Haag, 1955) also notes its appearance as surface finds throughout the Gulf embayment. It also appears to be present in northern Alabama, western Kentucky, southern Illinois and elsewhere in the lower Mississippi valley. The type does not appear to be represented in Oklahoma.

Age and Cultural Affiliation

The type is best represented from the Poverty Point culture in the Lower Mississippi valley for which a number of radiocarbon dates is available (Ford and Webb, 1956). These range from about 1300 B. C. up to 200 B. C. It is also present in the Archaic sites of Kentucky, Alabama and Illinois.

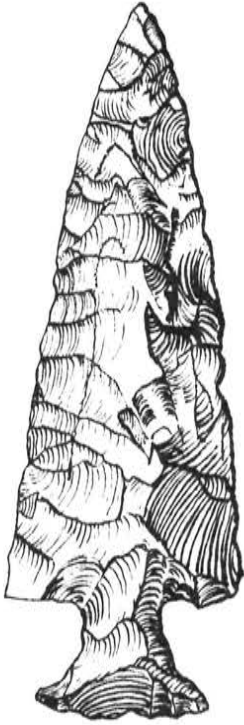
Remarks

Ford and Webb (1956, p. 57) have noted the close similarity between the Motley point and the Snyders point of the Hopewell culture in the central Mississippi valley. One feature of the Motley type which helps in identification is the relatively narrow necked stem. A characteristic example is represented by Figure F.

Source of Plate Illustrations

All of the specimens are from the Tom Gilcrease collection in Tulsa, Oklahoma. The drawings were made from actual examples found in the vicinity of Floyd, Louisiana. The catalog number is S-753 for the entire series.

MOTLEY



A



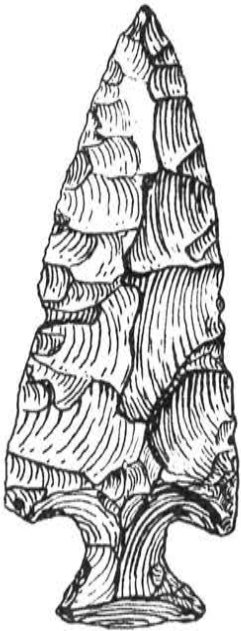
B



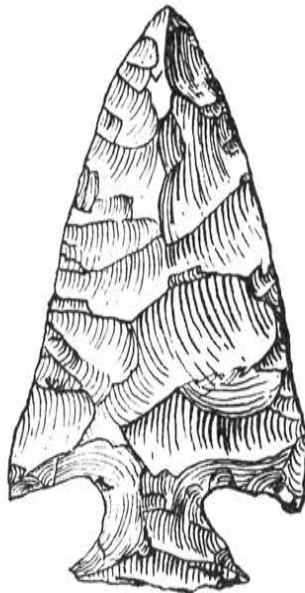
C



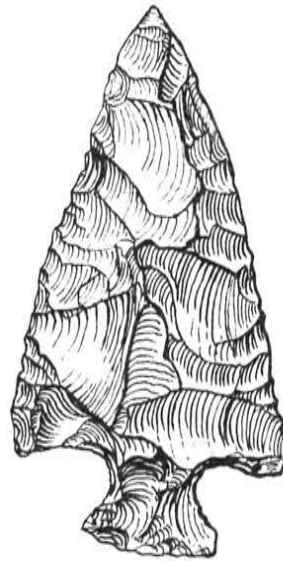
D



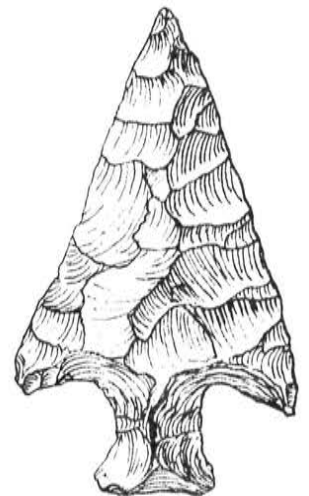
E



F



G



H

NODENA POINTS

The Nodena point is named from distinctive types found at the Nodena site in eastern Arkansas. Chapman and Anderson (1955, p. 15) use the term "Nodena" to refer to this group of points in their report on the Campbell site in southeastern Missouri. The type has been commonly referred to as the "willow-leaf" point by numerous writers and collectors for the past 25 years.

Description

The Nodena point is a finely chipped, willow-leaf shaped arrow point. The outline is one of a slender pointed ellipse, the base usually being rounded and not set off from the blade. In some examples the base is more pointed, rather than rounded, forming a double-pointed specimen. The points are widest in the mid-section area with the greatest width commonly falling toward the basal end of the specimen. The type is characterized by fine workmanship, the point having been made from a thin flake by careful pressure chipping.

In size the Nodena point ranges from about 1 to 3 inches in length, the great majority of specimens, however, falling between $1\frac{1}{4}$ and 2 inches.

Distribution

The Nodena point is found most frequently in eastern Arkansas along the Mississippi and St. Francis River valleys from the mouth of the Arkansas River northward to southeastern Missouri. It also occurs westward along the Arkansas River valley as far as Dardanelle, Arkansas. The type is apparently not found in Oklahoma.

Age and Cultural Affiliation

The Nodena point is a late prehistoric type apparently existing from perhaps 1400 to 1600 A. D. There is a possibility that it is to be associated with the Quapaw Indians.

The type is found occasionally in the New Madrid Focus but is more plentiful in the Menard, Parkin and Wall-Pecan Point Foci.

Remarks

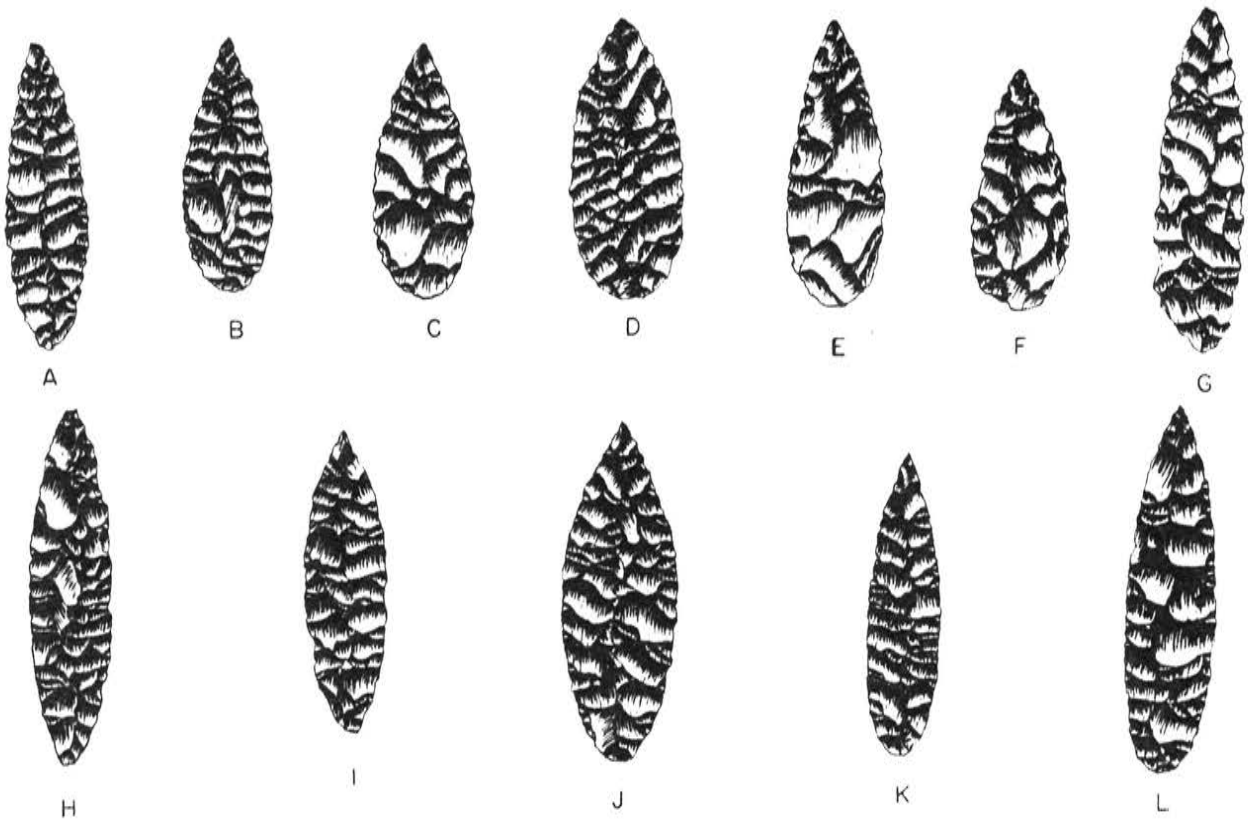
This type is most commonly found as caches associated with burials. The quality of workmanship, similarity in size, form and flint material for individual caches suggest that the type may represent specially prepared burial offerings. Specimen L illustrates an ideal type.

Source of Plate Illustrations

All drawings were made from the original specimens found at various sites in Arkansas. Specimens A through G are from the Frank Newkumet collection now in the University of Oklahoma Stovall Museum. Specimens H through L were furnished by Robert B. Hill of Tulsa, Oklahoma. The catalog numbers are as follows:

A and E	- AK-7/30	
B and D	- AK-7/35	Marked Tree, Arkansas
C	- AK-7/36	Marked Tree, Arkansas
F and G	- AK-7/32	Marked Tree, Arkansas
H to L	- No number	

NODENA



NOLAN POINTS

The Nolan projectile point was named by J. Charles Kelley and was referred to as the Nolan Beveled Stem point (1947a). Cyrus N. Ray had recognized the type as characteristic of the Clear Fork Culture in Central Texas (1938). Ray's Clear Fork Darts 1 and 2 were redesignated as Nolan Beveled Stem by Kelley. They are now referred to merely as Nolan points.

Description

The Nolan point is a medium sized, stemmed projectile point in which the diagnostic feature is the steep beveling of the stem. Suhm and Krieger (1954, p. 458) describe the type as follows: "Triangular blade of greatly variable length and width, edges convex or recurved, seldom straight. A slender, needle-sharp tip often results from convergence of recurved edges. Shoulders may be almost absent but usually strong and slant toward tip; barbs absent. Stem varies from narrow to broad, generally parallel-edged but sometimes expanded or contracted slightly. Bases usually straight but may be convex and in rare cases slightly concave. The type is most easily recognized by strong, steep bevels on the stem, usually along the right edge of both faces, occasionally on left edge. Rarely, blade is beveled too."

The size ranges from about 1 3/4 inches up to 5 inches in length, with the majority of specimens averaging between 2 and 3 inches. The stem length is fairly uniform at about 3/4 of an inch.

Distribution

Kelley illustrates a map showing the distribution of the Nolan point in Texas (1947a, p. 101). It is found chiefly in central Texas but extends to the north almost to the southwestern corner of Oklahoma, to the southwest as far as the Rio Grande valley and to the southeast as far as the central coastal area. Suhm and Krieger (1954) note the distribution "throughout Central Texas, extending to upper Brazos River drainage, lower Pecos River, and central Coastal area." No specific examples are reported from Oklahoma although the type may well occur in the southwestern part of the state.

Age and Cultural Affiliation

The age of the Nolan point has been subject to much debate, and no final conclusions are as yet available. It apparently lasted over a long period of time from perhaps 4000 B.C. up to perhaps 500 or 1000 A. D., covering the entire span of the Edwards Plateau Aspect (Suhm and Krieger, 1954).

Suhm and Krieger (1954) consider the Nolan point as a major type of the Edwards Plateau Aspect, and Kelley notes it as present in the Clear Fork and Round Rock Foci (1947a). It appears as a minor type in the Archaic Pecos River and Aransas Foci assemblages, although examples are smaller in size and not as well made as in the Edwards Plateau.

Remarks

The illustrations do not show the beveled stem satisfactorily. The beveled stem, however, is essential for proper identification of the Nolan point. Figure B represents a typical specimen.

Source of Plate Illustrations

All specimens were supplied by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The examples shown are from sites in Texas, and are now in the University of Texas collections. The catalog numbers are as follows:

A - 5-11-3075-b	D - 5-6-1278-h	G - 5-11-3075-k
B - 5-11-3075-m	E - 5-6-1278-f	H - 5-6-1278-e
C - 5-14-3852-d	F - 1872 F. Bell	I - 5-6-1141-i

NOLAN



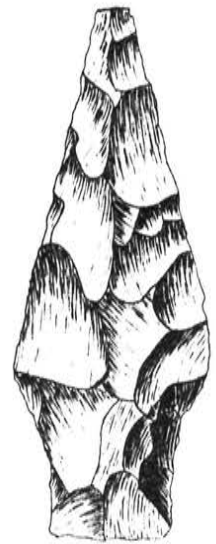
A



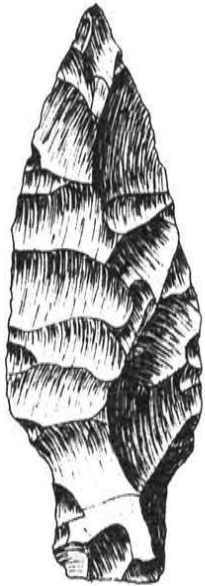
B



C



D



E



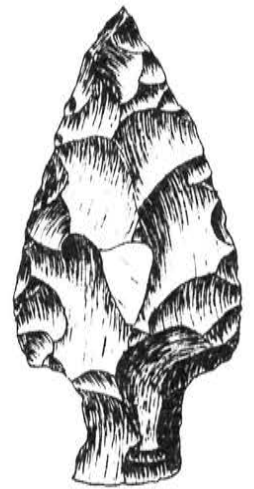
F



G



H



I

OSCEOLA POINTS

The name Osceola has been suggested by Robert E. Ritzenthaler for a distinctive type found at the Osceola site in Wisconsin (Ritzenthaler, 1946). Scully, (1951, p. 7) referring to examples from central Illinois, calls this type Hemphill Notched.

Description

The Osceola point is a large dart or spear point characterized by side notches. The blade is relatively long and narrow with edges that tend to be parallel in most instances. The blade edges converge toward the tip somewhat abruptly, the general width of the blade being maintained throughout most of the length. The notches are cut in from the side near the base and may be either squared or rounded. The stem section is of the same width as the blade, continuing the general blade outline. The base is either straight or concave with the concave base being more typical. The chipping is well done, first by rather large percussion flaking and then by finer chipping along the edges and base.

In size the Osceola point ranges from perhaps 3 to 9 inches in length with specimens falling between 4 and 5 inches being most typical.

Distribution

The Osceola point is known to occur in Wisconsin, Illinois and Missouri. It is probably found occasionally in surrounding localities although the area of distribution is not known. The type is not reported from Oklahoma.

Age and Cultural Affiliation

There are two radiocarbon dates from the Old Copper culture (Oconto site) in Wisconsin suggesting an antiquity dating from 5000 to 3000 B. C. (Libby, 1954, p. 740).

It is associated with the Old Copper culture in Wisconsin but apparently lasts throughout a considerable portion of the Archaic period.

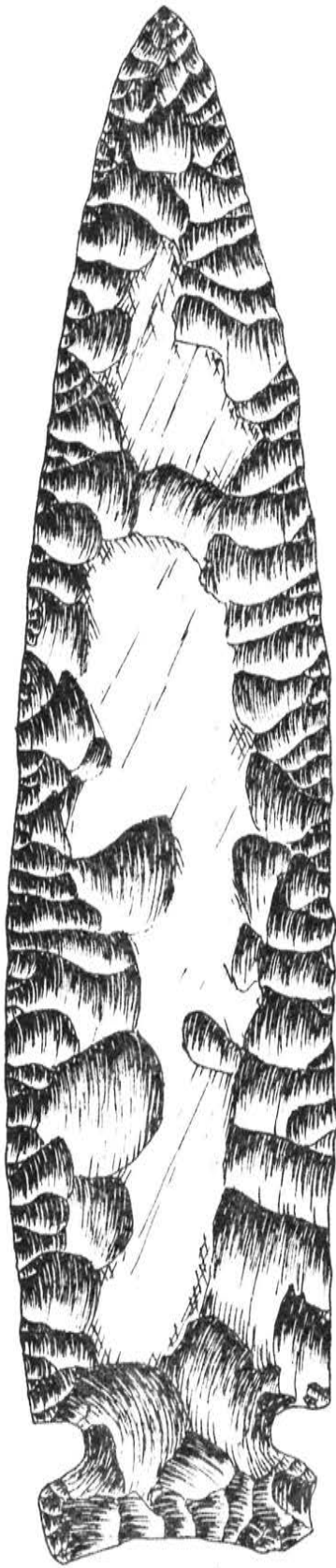
Remarks

A similar shaped point of smaller size is known as Black Sand Notched (Scully, 1951). The Black Sand point, however, is shorter in length and appears to be somewhat later in date. Figure B represents a characteristic example of the Osceola point.

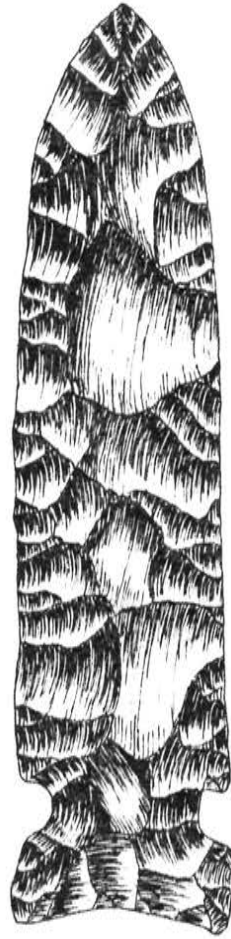
Source of Plate Illustrations

All specimens are from the Osceola site in Grant County, Wisconsin. The drawings were made from photographs furnished by Robert E. Ritzenthaler of the Milwaukee Public Museum, Milwaukee, Wisconsin.

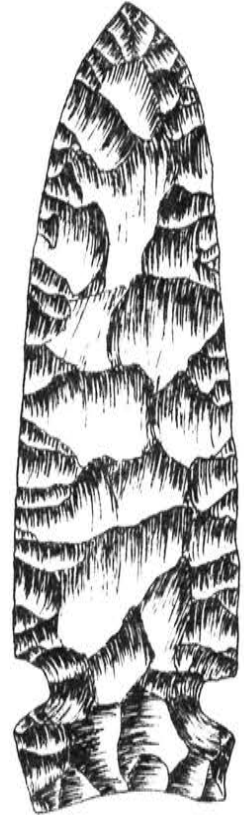
OSCEOLA



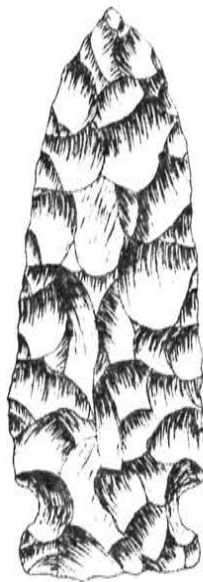
A



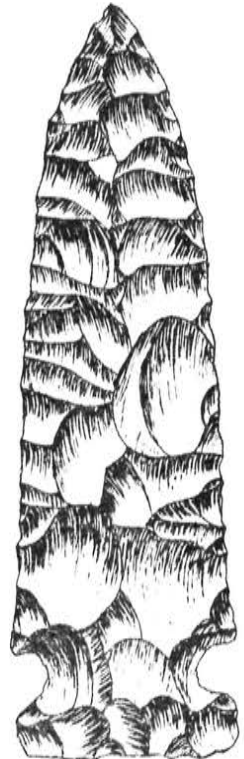
B



C



D



E

PANDALE POINTS

The Pandale point was designated the Pandale Twisted Blade by Charles Kelley and was described by Suhm and Krieger (1954, p. 464).

Description

The Pandale point is recognized chiefly by the "twist" or bevel of the blade. It is not especially consistent in stem form or outline. Suhm and Krieger (1954) describe the type as follows: "Long and slender blade, more often leaf-shaped than triangular, edges usually strongly convex, occasionally straight or recurved to a long needle-like tip. Shoulders poorly developed, often absent. Type most easily recognized by beveling of blade so strongly that it is more like a propeller in cross section than the ordinary edge bevel; that is, the twist begins along the center line of the blade rather than near the edge. Stems are also beveled, but in opposite direction from blade, so that the artifact has a peculiar cork-screw twist, the purpose of which is unknown. Stems variable, from parallel-edges to somewhat expanded or contracted, and bases straight, concave, or convex." The length ranges from about $1\frac{1}{2}$ to $3\frac{1}{2}$ inches with the average falling around 2 or $2\frac{1}{2}$ inches long.

Distribution

The Pandale point is found chiefly in west Texas and apparently is most frequent in the region around the confluence of the Pecos and Rio Grande. The type extends eastward and north into Central Texas but is much more rare in this area. (Suhm and Krieger, 1954). No examples are reported from Oklahoma.

Age and Cultural Affiliation

Suhm and Krieger (1954) give an estimated age for the Pandale point as ranging from possibly 2000 B. C. up to 700 or 800 A. D.

The Pandale point is represented primarily in the Pecos River Focus of West Texas, but it does occur in the Edwards Plateau Aspect of Central Texas (Suhm and Krieger, 1954).

Remarks

Suhm and Krieger (1954) note a general similarity between Pandale and Nolan in outline. Although the Nolan point has a beveled stem, the blade is not beveled and it lacks the twist so characteristic of the Pandale. It also somewhat resembles the Travis point in form; the Travis point, however, lacks the twisted blade and beveled stem. Suhm and Krieger (1954) point out that the type is not to be confused with poorly made points chipped from a twisted or curved flake; the Pandale points were made to twist by the chipping technique. Figure A represents a typical specimen.

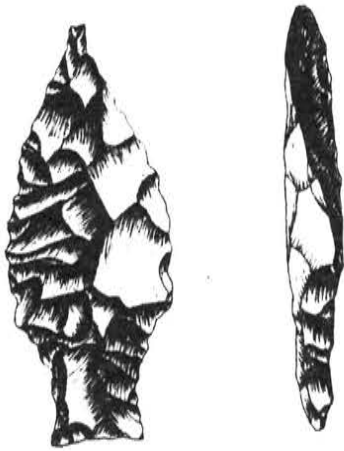
Source of Plate Illustrations

The drawings illustrate both a front and side view of each example in an effort to show more clearly the distinctive twist of the Pandale point. This feature, however, can best be seen on an original specimen.

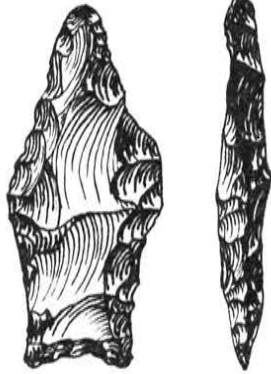
All examples illustrated are from sites in Texas. Specimen A is from the Mr. H. L. Shorter collection of Dallas, Texas, and all other examples were supplied by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - No number	F - Wm. Boggess 1W-24-12
B - F. Bell 1047	G - F. Bell 1003
C - F. Bell 1756	H - F. Bell 1002
D - F. Bell 1020	I - F. Bell 1014
E - F. Bell 1026	

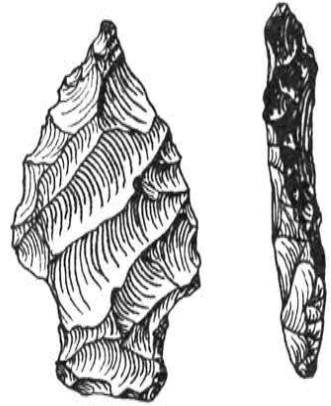
PANDALE



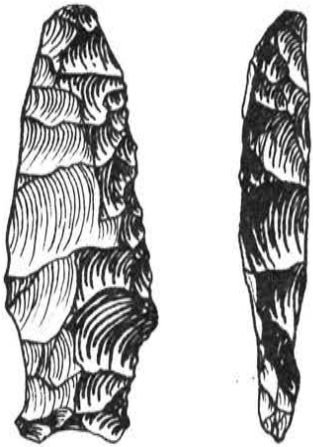
A



B



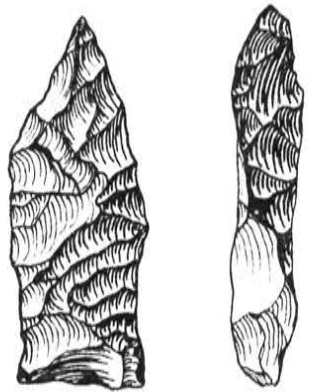
C



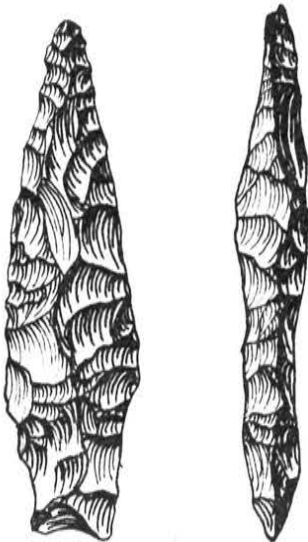
D



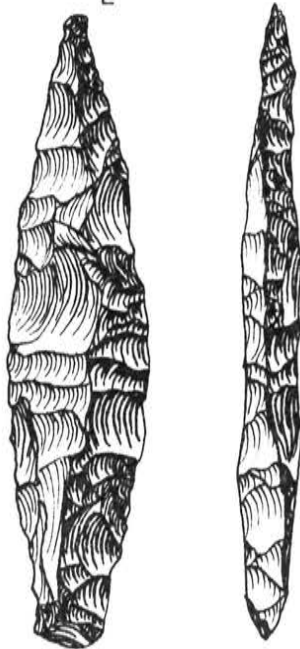
E



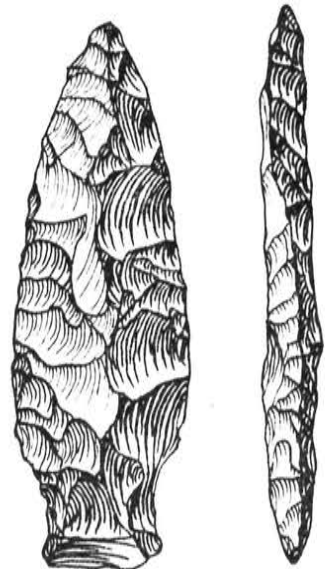
F



G



H



I

PEDERNALES POINTS

The Pedernales point has been named by J. Charles Kelley, and was formerly called the Pedernales Indented Base point (1947a). It has been described by Suhm and Krieger (1954, p. 468).

Description

The Pedernales point is characterized by a bifurcated stem which is commonly parallel sided or slightly tapering with a deep concavity in the base. The blade is commonly triangular with prominent shoulders which may be barbed. It is a fairly large sized dart point with good workmanship on most examples. Suhm and Krieger (1954, p. 468) describe the type as follows: "Blade usually triangular but often leaf-shaped and varying greatly in dimensions and proportions. Edges usually straight or convex, but occasionally concave, recurved, or narrowed to a slim needle-like tip. Shoulders vary greatly from weak to narrow and right-angular and through various degrees of barbs from very small to very large, reaching almost to base of stem. While blade is highly variable, the type is best recognized by its more or less rectangular stem with concave to deeply indented, U - shaped base. The base is often thinned, either with two or three small longitudinal flakes removed, or a single large flake, on either or both sides - - - the stem of Pedernales points are only very rarely smoothed. The stems may contract somewhat or bulge outward with convex edges."

In average size the Pedernales point ranges from about $2\frac{1}{2}$ to $3\frac{1}{2}$ inches long. Smaller specimens are commonly reworked along the blade.

Distribution

Suhm and Krieger (1954) list the Pedernales type as "very common over all of Central Texas, extending much less commonly into the adjacent portions of Coastal, North-Central, and Trans-Pecos Texas. Not found, unless very rarely and probably intrusively, in East and Southwest Texas."

The occurrence of Pedernales in Oklahoma is questionable at present.

Age and Cultural Affiliation

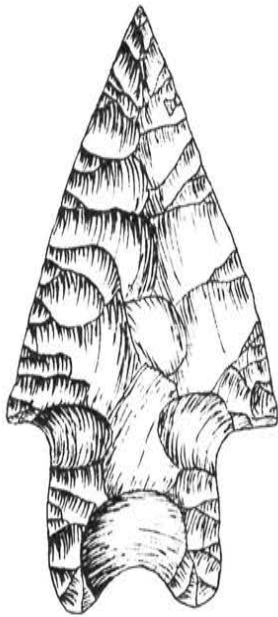
The Pedernales type is a common point found associated with the Edwards Plateau Aspect of the Archaic period. It apparently lasts for a long period of time, possibly from 4000 B. C. up to 500 or 1000 A. D. (Suhm and Krieger, 1954). Kelley (1947a) reports Pedernales as common in the Round Rock Focus of Central Texas. Suhm and Krieger (1954) report it as a minor type in the Pecos River Focus, but as a common point in the Central Texas Edwards Plateau Aspect. Specimens A and C are characteristic specimens.

Source of Plate Illustrations

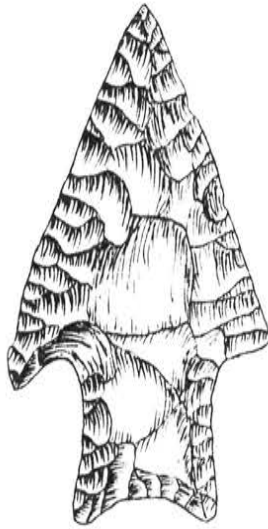
All drawings were made from original specimens furnished by Dr. Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The examples are from central Texas, and the originals are now in the University of Texas collections. The catalog numbers are as follows:

A - 5-6-1276a	E - 5-6-1283h
B - 5-11-3084R	F - 5-11-3081n
C - 5-6-1276d	G - 5-6-1283g
D - 5-6-1283d	H - 5-6-1283j

PEDERNALES



A



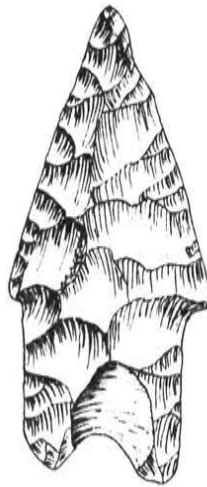
B



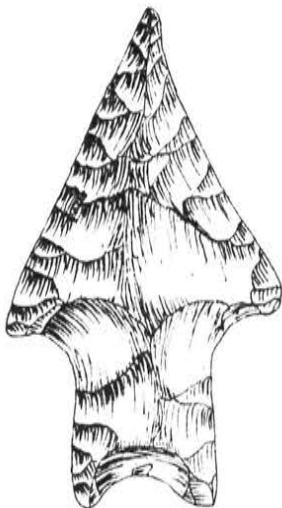
C



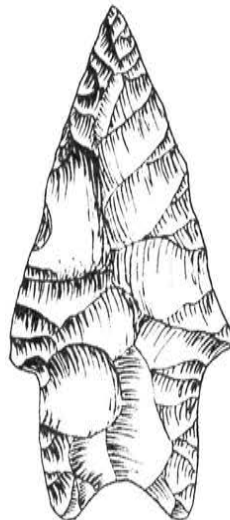
D



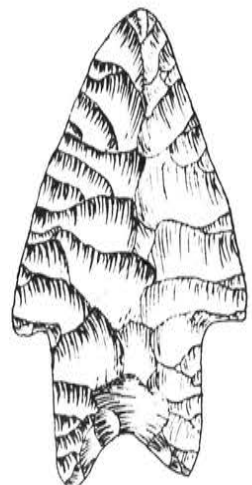
E



F



G



H

PLAINVIEW POINTS

The Plainview point has been named after a site at Plainview, Texas, where points of this type were found associated with the bones of extinct bison (Sellards, Evans and Meade, 1947).

Description

The Plainview point is basically a lanceolate point having relatively parallel sides and a concave base. Krieger (1947, pp. 17-18) has described the type specimens from the Plainview site in which he points out variations in the chipping. "One has a well defined ridge in the center of each face, with rather crude but nevertheless definite collateral chipping. Several other specimens from the site show similar chipping. Several other examples have irregular chipping which is most common in the Plainview series. The edges of most specimens are parallel but some expand very slightly at about the mid-point. None are widest beyond the mid-point in the typical Folsom fashion. In length they range from about $2\frac{1}{2}$ to $3\frac{1}{2}$ inches, longer than most Folsoms and more like Clovis. The basal concavity is shallow and compound, rounding into the basal corners exactly as in Clovis, and hence different from Folsom. Generally speaking, the Plainview points strongly suggest Clovis points in most respects, except of course for the absence of fluting. The collateral chipping, on the other hand, suggests some relationships with the Eden point, even though there is a great difference in the shape and proportions. The basal edges of Plainview points, in all but one case, are well smoothed."

Distribution and Association

The Plainview point has a fairly wide distribution. Suhm and Krieger (1954, p. 472) state that it "Occurs practically throughout Texas although never frequent in any site or area; same may be said for distribution throughout Great Plains into south-central Canada. Specimens are known from Alaska and from northeastern Mexico; also from Arizona, New Mexico, and from such states as Louisiana, Arkansas, Missouri, and others farther east."

At the Plainview site (Sellards, Evans & Meade, 1947) and the Lone Wolf Creek site (Wormington, 1957, p. 110), both in Texas, Plainview points were found in association with extinct bison. The type is also associated with other early type points such as Meserve, Scottsbluff and Eden (Suhm and Krieger, 1954).

The type is found throughout Oklahoma although it is more common in the western part of the state than elsewhere.

Age and Cultural Affiliation

There are two radiocarbon dates from the Plainview site itself (Krieger, 1957, p. 322). One of these gives an antiquity of 9170 ± 500 years ago, and the other a date of 7100 ± 160 years ago. The latter sample was possibly contaminated so the earlier assay is to be preferred. Apparently, however, the Plainview type was used over a long time, and a range from around 7000 B. C. up to 2000 B. C. is suggested (Suhm and Krieger, 1954).

The type represents one of the early Paleo-Indian hunting cultures of western North America.

Remarks

The Plainview point resembles an unfluted Clovis point in most characteristics. The workmanship is of good quality, and this is frequently a clue to identification.

Source of Plate Illustrations

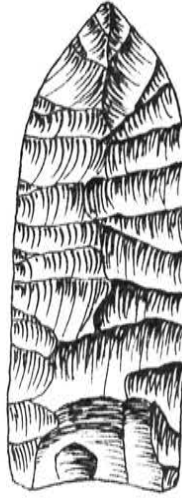
The drawings were prepared from illustrations in Sellards, Evans and Meade (1947) of type specimens from the Plainview site. Specific points are referred to as follows:

- | | |
|---------------------|---------------------|
| A - Plate 3, Fig. 1 | D - Fig. 5, p. 934 |
| B - Plate 3, Fig. 2 | E - Plate 5, Fig. 1 |
| C - Plate 3, Fig. 3 | F - Plate 4, Fig. 1 |

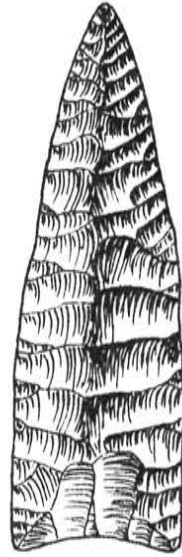
PLAINVIEW



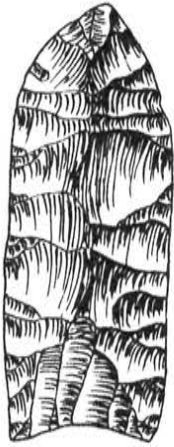
A



B



C



D



E



F

REED POINTS

The Reed point has been named by David A. Baerreis (1954, p. 44) from types found at the Reed and Huffaker sites in northeastern Oklahoma.

Description

This type is a small arrow point characterized by side notches placed close to the base. Baerreis (1954) describes the Reed point as follows: "the side of the point below the notch shows a change in direction, either being straight (parallel-sided) or contracting - - - the side notches of this type are set close to the base so that the extent of the side below the notch is generally not more than 3mm. In addition, the area below the notch is generally rounded rather than straight-sided. The basal area is either straight, concave, or slightly convex, this variation being regarded as an alternative feature. Slight serrations may appear on the body but are not common."

Baerreis (1954) notes that examples found at the Reed site include specimens having squared rather than rounded stems. The relative shortness of the stem section is one distinctive feature of the Reed point.

Size ranges from about $5/8$ to $1\frac{1}{4}$ inches with the average specimen falling between $3/4$ and 1 inch in length.

Distribution

The Reed point is found throughout many sections of Oklahoma and elsewhere; the actual area of distribution is not now known. Specimens are found commonly at a number of Oklahoma sites such as Reed, Huffaker, Morris, Norman, Spiro, etc.

Age and Cultural Affiliation

It is not clear as to when the Reed type first appears. In eastern Oklahoma the point is normally associated with pottery and agriculture, appearing most commonly in sites of the Gibson Aspect or later. An estimated age would range from perhaps 500 A. D. up to 1500 A. D.

The type is widespread and is likely to occur in late pottery sites of eastern Oklahoma. It tends to be associated with both the Gibson and Fultca Aspects in the Caddoan area.

Remarks

The Reed point might be confused with the Washita point in size or notching; the Washita point, however, has stem edges which expand toward the base following the outline of the blade, and the side notches are placed more toward the mid-section rather than close to the base. Specimens D and J can be considered as typical examples.

Source of Plate Illustrations

All drawings were made from the original specimens in the University of Oklahoma collections. The series illustrated are all from a single cache found in association with Burial #99 at the Spiro mound. The catalog number for the entire cache is LfCr-1, Burial #99.

REED



A



B



C



D



E



F



G



H



I



J



K



L



M



N

REFUGIO POINTS

The Refugio point has been named by Suhm and Krieger (1954, p. 474) from types found in Texas.

Description

The type is a large sized, slender oval shaped dart point. Suhm and Krieger (1954) describe the Refugio point as follows: "Long and slender blade, triangular to leaf-shaped; edges usually convex, occasionally nearly straight and sometimes brought to a long, needle-like tip. On narrowest specimens, edges may be nearly parallel for some distance. By definition, bases convex to semicircular, to distinguish from Kinney points with concave bases and Pandora points with straight bases. Most of body usually quite thick with ridge on both faces but lower 1/3 or so is notably thinned down to facilitate hafting. Thus, although no real shoulders are present, most of the artifacts have what amounts to a stem section set off from the blade; in this respect they also differ from Kinney and Pandora points. Black asphaltum stains sometimes occur on this stem section on specimens near the coast, indicating use of asphaltum in cementing haft."

In size, the type ranges from about 2 $\frac{1}{4}$ to 4 inches in length, rarely falling outside these limits.

Distribution

Suhm and Krieger (1954) list the type as being "found widely in central Coastal area, Southwest, Central, and North-Central areas, and lower Pecos River." The type appears in Oklahoma and elsewhere, but the total area of distribution is unknown.

Age and Cultural Affiliation

The estimate age is possibly 2000 B. C. to 1000 A. D. (Suhm and Krieger, 1954).

In Texas the type is found in various Archaic complexes including the Pecos River, Carrollton, Falcon and Edwards Plateau. Finds in Oklahoma appear to be equally early in time since they occur chiefly on non-pottery sites.

Remarks

Although considered a point, the Refugio type could serve equally well as a knife. Knives, however, commonly display evidence of resharpening on one or both edges, a feature which is not characteristic of Refugio points.

Source of Plate Illustrations

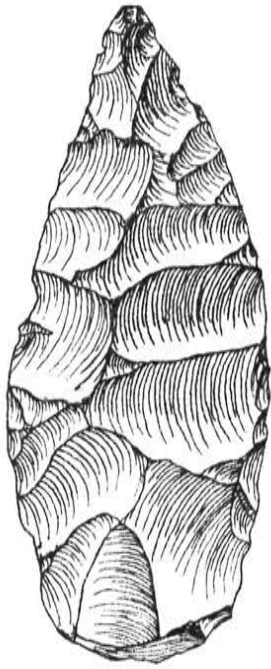
All drawings were made from Texas specimens furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 7-1-1199b	F - 7-1-1194b
B - 5-24-4849-n	G - 7-1-1300-E
C - 7-1-1304-c	H - 7-1-971-a
D - 7-1-603-E	I - 7-1-971-b
E - 7-1-1197-d	

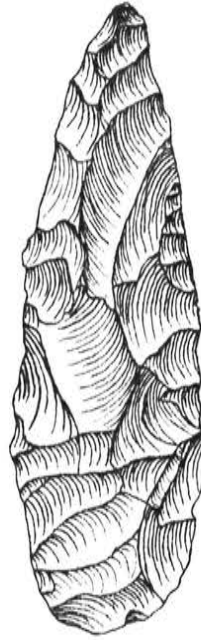
REFUGIO



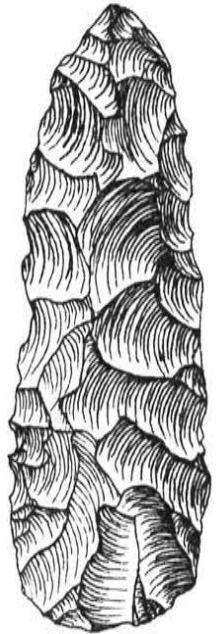
A



B



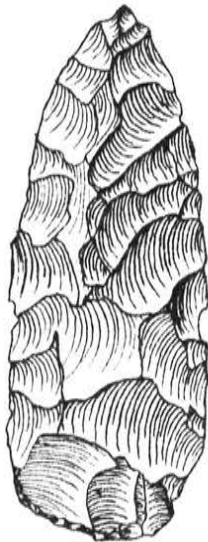
C



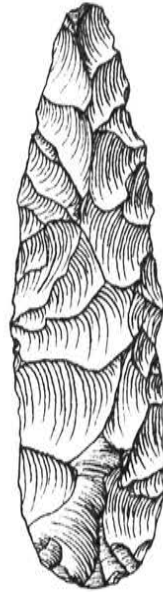
D



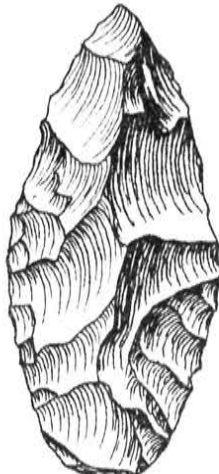
E



F



G



H



I

SANDIA I POINTS

The Sandia I type projectile point has been named from discoveries made at Sandia Cave in New Mexico (Hibben, 1941). Sandia Cave is situated on the east side of Las Huertas Canyon at the north end of the Sandia Mountains, approximately 25 miles northeast of Albuquerque, New Mexico. During the excavations carried out over the period from 1936 to 1940, two distinctive projectile point types, Sandia I and Sandia II, were discovered and recognized as some of the earliest evidence of man in North America. The Sandia points were found in a layer stratigraphically underneath a deposit containing Folsom points and hence must be considered as older than Folsom.

Description

The Sandia I type point is a lanceolate or elliptical shaped blade having a shoulder on one side of the stem. It is asymmetrical or lopsided in outline. The stem tapers from the shoulder and is gently rounded with no effort made toward basal thinning. The stem also exhibits grinding along the sides and base. A cross-section of the point is lenticular or a flattened oval in shape. In size, most of the specimens range between $2\frac{1}{2}$ and $3\frac{1}{2}$ inches in length. The chipping is average but not fine as in the Eden, Scottsbluff or Folsom points. Many of the flake scars tend to be rather large with a minor amount of secondary chipping. The material from which the points were made has not been identified as to the source, but it is not from well known quarries. In all likelihood, most of the material came from local cherty nodules in the Magdalena limestone formation (Hibben, 1941, p. 29).

Distribution and Association

A total of 19 Sandia points including both types (I and II) were found at Sandia Cave; another single specimen of type II is reported from Manzano Cave (Hibben, 1941, p. 35). Five specimens, two type I and three type II, were discovered in situ at the Lucy site in the Estancia Valley of central New Mexico (Roosa, 1956). In 1946, Hibben reported on some 38 specimens from various sections of the United States. From the distribution of these 38 points, Hibben suggests that Sandia I has a more northern and easterly distribution than Sandia II. He notes examples from central Oklahoma to western and southern Missouri and southern Iowa (Hibben, 1946). Other possible Sandia points are reported as surface finds from Alabama, Alberta and Saskatchewan (Wormington, 1957).

The Sandia I point is associated with extinct animals at Sandia Cave. Examples of extinct horse, bison, camel, mastadon and mammoth have been identified from the deposit containing Sandia points (Hibben, 1941, p. 33). At the Lucy site, the points were found in association with the mammoth (Roosa, 1956).

Age and Cultural Affiliation

The Sandia I point represents one of the oldest, if not the oldest, artifacts of man in the New World. The relationship between the Sandia point and the Clovis point (which is older than Folsom) is not yet understood, but on the basis of workmanship and simplicity, the Sandia point should be older than Clovis. Radiocarbon dates based upon an analysis of antler from the Sandia Cave deposit suggest an antiquity of about 20,000 years ago (Crane, 1956).

Remarks:

There are some hints at Sandia Cave which suggest that Sandia I may be somewhat older than Sandia II types (Hibben, 1941, p. 24). Hibben (1946) also mentions that some known examples tend to fall between the two types, having some characteristics of each. The finding of both types in close association at the Lucy site, however, suggests contemporaneity of the two forms.

The identification of Sandia points will remain questionable in most cases unless they have been found under circumstances indicating considerable antiquity. Asymmetrical or damaged points of other types are frequently erroneously identified as Sandia points. Positive identification will almost necessitate discovery in association with extinct animal remains.

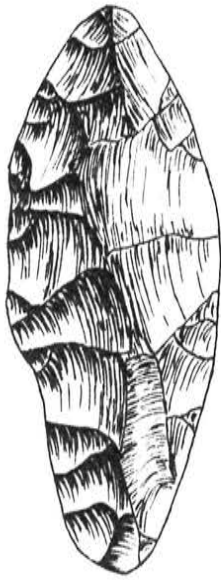
Source of Plate Illustrations

All examples are taken from Hibben, 1946. A) Plate 10, 2a; B) Plate 11, a; C) Plate 11, c; D) Plate 11, e; E) Plate 11, b; F) Plate 11, d; G) Plate 11, f.

SANDIA I



A



B



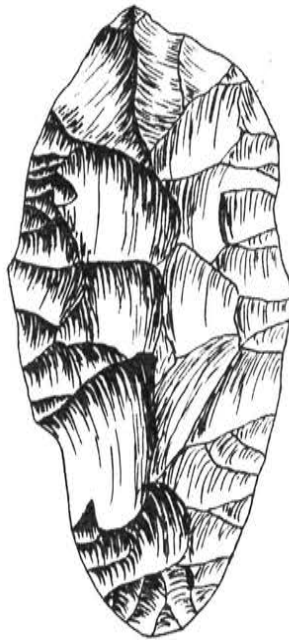
C



D



E



F



G

SANDIA II POINTS

The Sandia II projectile point type represents a second variety of the Sandia point. It has been named by Hibben (1941) from discoveries made at Sandia Cave (See data for Sandia I).

Description

The Sandia II point resembles Sandia I in most characteristics except the stem and base. Sandia II has a single shoulder, but the stem rather than tapering to a gently rounded base, is more rectangular in shape. The base has been thinned and may be straight or concave. In the examples from the Lucy site (Roosa, 1956) the concave base is quite deep, whereas the specimens from Sandia Cave are only slightly concave. The stem is ground along the edges. In cross-section, Sandia II is likely to be more diamond-shaped than lenticular.

Distribution and Association

See data for Sandia I.

Age and Cultural Affiliation

See data for Sandia I.

Remarks

Photographs suggest that Sandia II may display somewhat better workmanship. The concave base and thinning of the base could represent a development preliminary to actual fluting such as represented on the Clovis point.

The identification of Sandia points will remain questionable in most cases unless they have been found under circumstances indicating considerable antiquity. Asymmetrical or damaged points of other types are frequently erroneously identified as Sandia points. Positive identification will almost necessitate discovery in association with extinct animal remains.

Source of Plate Illustrations

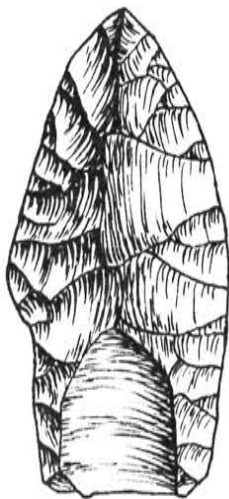
All examples are taken from Hibben, 1946.

A - Plate 10, 2b	D - Plate 12, 1c
B - Plate 12, 1a	E - Plate 12, 2b
C - Plate 12, 1b	F - Plate 12, 2c

SANDIA II



A



B



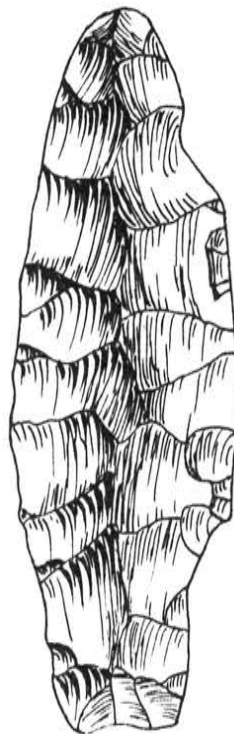
C



D



E



F

SAN PATRICE POINTS

The San Patrice point has been named by Webb (1946) from types found on San Patrice Creek in De Sota Parish, Louisiana.

Description

Webb (1946) has described the type as follows: "These points are of medium size, between the small arrowheads (commonly called 'bird points') and the large projectiles which are thought to be atlatl lance points. The typical artifact is unhafted, with concave base, the concavity usually being deep and occasionally V-shaped. The edges are always concave in the basal portion, usually straight or convex in the upper portion, producing a well defined shoulder at the level of greatest width. . . Characteristic of these projectile points, in addition to the concavity of the base, is a thinning of the basal segment by a wide groove on each face, effected by the removal of one to three longitudinal flakes. This grooving extends from the base concavity to or beyond the level of the shoulder, involving one-third to two-thirds of the total length The basal portion of each edge is moderately smooth, while the upper portion is brought to a good blade by secondary flaking in most instances."

Suhm and Krieger (1954, p. 477) describe the San Patrice type as follows: "Triangular blade, often stubby, with edges straight, convex, or concave; occasionally, blade is leaf-shaped. Shoulders weak, often absent. Blade sometimes beveled on right or left edge of both faces but more often all four edges appear steep because of removal of center of stem and blade by thinning or fluting. Stem edges sometimes cut inward with notches, otherwise parallel or somewhat contracted. Some stem edges are concave but since all stems are smoothed by grinding, such concavities appear to be due to excessive grinding. Bases always concave, often deeply."

In size, most San Patrice points fall between 1 and 1½ inches in length.

Distribution

The distribution is not well known but examples are found throughout northern Louisiana, southern Arkansas, northeastern Texas and eastern Oklahoma.

Age and Cultural Affiliation

The age of the San Patrice point is not established although it is certainly associated with the Archaic period. An estimated age should fall somewhere between 3000 B. C. and the birth of Christ.

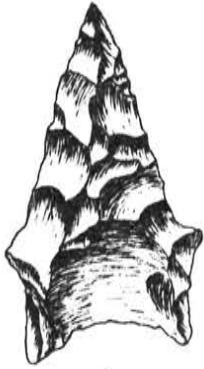
The cultural affiliations are also unknown although the type appears to be most common in the pre-pottery sites of northwest Louisiana.

Source of Plate Illustrations

All of the drawings were made from the original specimens found in Louisiana. They were furnished by Clarence Webb of Shreveport, Louisiana. The catalog numbers are as follows:

A, D, G, I and L - D-11
B - N-12
C and E - C-8
F - C-1
H - R-1
J - R-2
K - C-7

SAN PATRICE



A



B



C



D



E



F



G



H



I



J



K



L

SCOTTSBLUFF POINTS

The Scottsbluff type projectile point has been named from examples found at the Scottsbluff bison quarry near Scottsbluff, Nebraska (Barbour and Schultz, 1932).

Description

The Scottsbluff point is a fairly large projectile of fine workmanship. It has a square or rectangular stem, often with weakly defined shoulders. The stem is commonly ground along the sides and base. Wormington (1957, p. 267) describes the Scottsbluff type as follows: "Points with somewhat triangular or parallel-sided blades, small shoulders and broad stems. The flaking is usually of the transverse parallel type, but it may be more irregular. The cross-section is a thick oval. The stem edges are usually ground. The range in length is from two to five inches. Most specimens are between three and four inches long and about one inch wide. Many of those that are less than three inches long compare with the longer specimens in breadth and may represent points that were reworked after the tips had been broken."

Wormington (1957) further suggests that the Scottsbluff type can be subdivided into two sub-types: Type I and Type II. Type I tends to be longer, thicker in cross-section and with weakly defined shoulders. Type II tends to be shorter and wider, thinner in cross-section, and with more clearly defined shoulders.

Distribution and Association

The Scottsbluff point has a fairly wide distribution. Wormington (1957) reports this type from Saskatchewan, Alberta, British Columbia, Washington, Wyoming, Montana, Colorado, Nebraska, New Mexico, Texas, Louisiana and Arkansas. It is also found throughout Oklahoma although examples are not at all common.

Wormington (1957) suggests that the Scottsbluff point be assigned to the Cody complex such as represented at the Horner site near Cody, Wyoming. At this site, the Scottsbluff point was found in association with examples of the Eden point and the Cody knife. Bison remains are present at sites where Scottsbluff types have been found: Scottsbluff, Lime Creek, Finley, MacLaffie, San Jon, Horner, etc., but it is not clear whether these are the remains of an extinct form or not.

Age and Cultural Affiliation

An antiquity of from 7000 to 9500 years is suggested for the Scottsbluff type point. Radiocarbon dates from the Lime Creek site in Nebraska suggest a date of 9,524 \pm 450 years ago. (Libby, 1955). Radiocarbon dates from the Horner site near Cody, Wyoming suggest a date of 6876 \pm 250 years ago and 6,920 \pm 500 years ago. (Libby, 1955).

Wormington assigns the Scottsbluff type to the Cody complex (1957), an early Paleo-Indian manifestation of the Great Plains.

Remarks

The Scottsbluff point represents some of the finest workmanship to be found in the New World. The quality of chipping often supplies a clue to identity, even in the case of fragments.

The wide distribution of this type from Texas to Canada suggests considerable antiquity which is supported by radiocarbon dates. The quality of workmanship, however, suggests a specialization that must have had its origin elsewhere, possibly from Archaic stemmed forms in the Mississippi Valley.

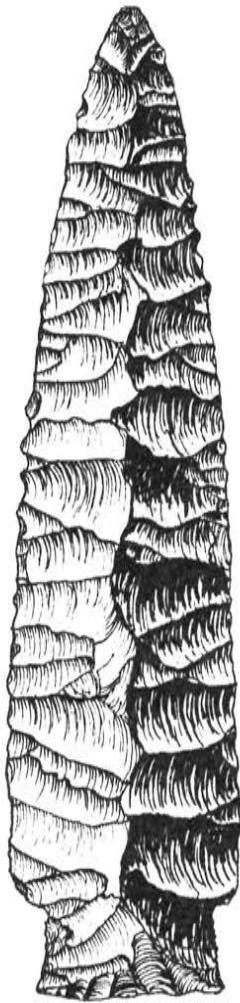
Source of Plate Illustrations

A) McCurtain County, Oklahoma, University of Oklahoma; B) S-1037, Nevada County, Arkansas; C) S-656, Hempstead County, Arkansas; D) S-588, Jake Jungs, Arkansas; E) S-130, Arkansas; F) S-933, Schaal, Arkansas; G) S-131, Arkansas. All specimens except (A) are from the Thomas Gilcrease collection, Tulsa, Oklahoma.

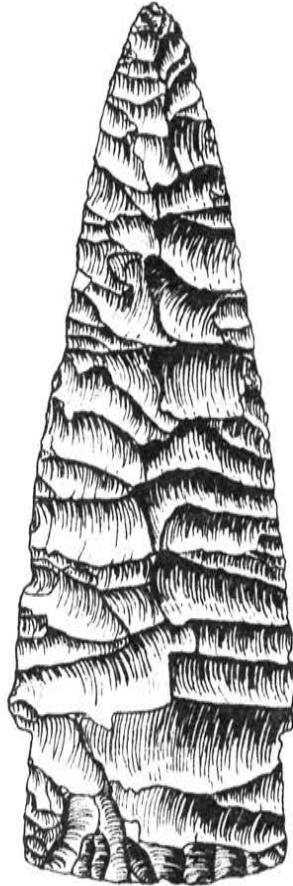
Wormington's Type I - B, E, F and G

Wormington's Type II - A, C and D.

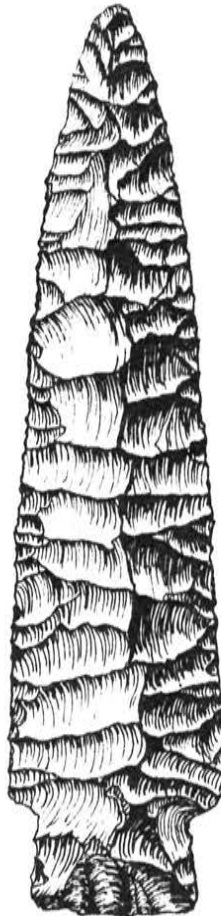
SCOTTSBLUFF



A



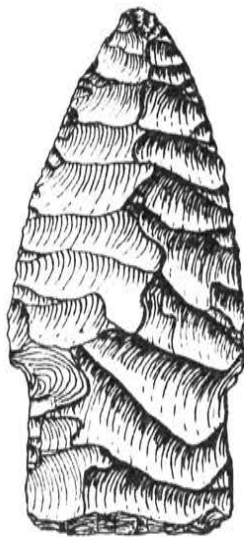
B



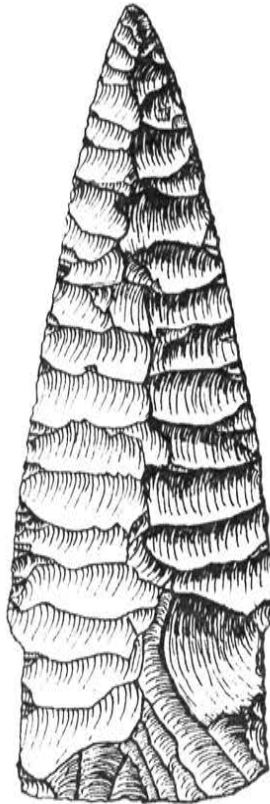
C



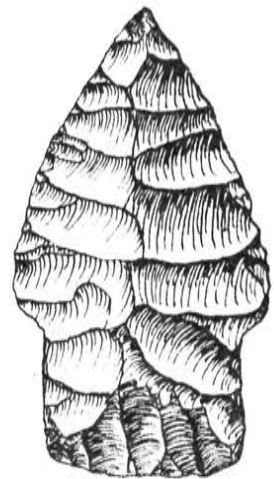
D



E



F



G

SNYDERS POINTS

The Snyders point has been named by Edward G. Scully from types found in Illinois (Scully, 1951, p. 12).

Description

This type is a large sized, broad, carefully made corner-notched dart point. In outline the Snyders point is a broad ovate blade having broad corner notches cut in from the corner to produce an expanding stem. The blade is triangular with convex edges terminating in bold barbs. The stem is relatively short and expands toward the base which is normally convex. The notches are wide and deeply cut, usually well rounded and carefully executed. The point is relatively broad but thin in cross-section, and it normally exhibits better than average workmanship.

In size the Snyders point ranges from about 2 inches to 6 inches; the majority of specimens, however, fall between $2\frac{1}{2}$ and 3 inches in length.

Distribution

Scully (1951) lists the Snyders point as being found in central and northern Illinois, southwestern Michigan and eastern Missouri. The type is found, however, over a considerably larger area including the Ohio Valley and the central Mississippi Valley. The type is relatively common in northeastern Oklahoma.

Age and Cultural Affiliation

The Snyders point is associated with the Middle Woodland culture called Hopewellian which flourished from approximately 500 B. C. to 500 A. D.

The Oklahoma examples are associated with the Woodland horizons such as at the Cooper site in northeastern Oklahoma (Bell and Baerreis, 1952).

Remarks

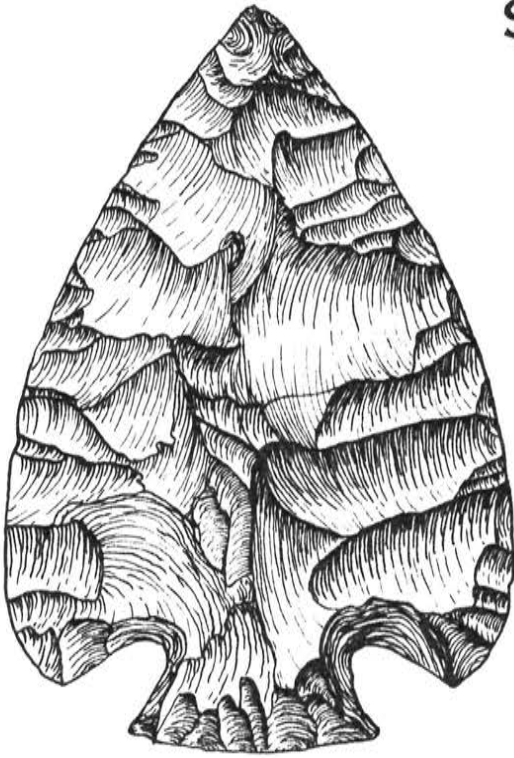
Many of the Snyders points are made of a white or light colored flint from quarries in Missouri or Illinois. Figure B represents a typical Snyders point from Illinois Hopewell.

Source of Plate Illustrations

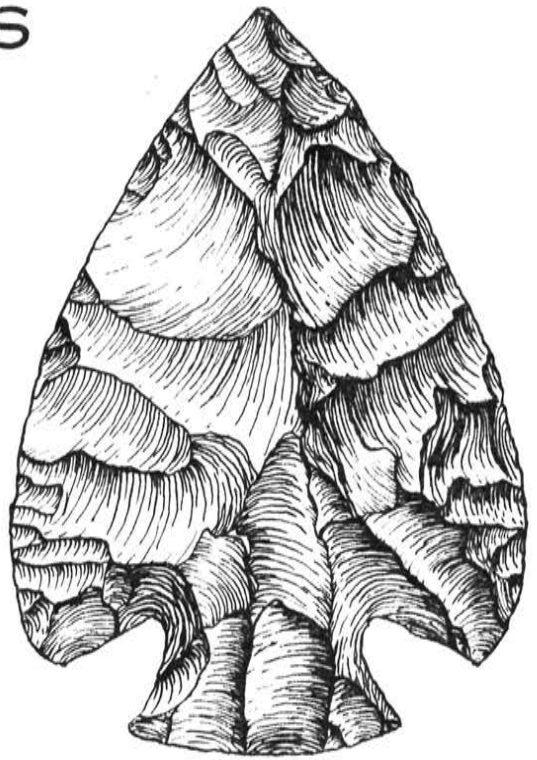
Figures A, B, D, and E were made from photographs furnished by Thorne Deuel of the Illinois State Museum at Springfield, Illinois. Figure C was drawn from the original specimen found in Butler County, Ohio. Additional data on the specimens illustrated are as follows:

- A - Deuel, 1952, Plate IX, Fig. J; Dickison Mound #478, Log tomb near burial #3, Peoria County, Illinois
- B - Deuel, 1952, Plate IX, Fig. I; as above
- C - #1197, Butler County, Ohio
- D - Deuel, 1952, Plate IX, Fig. N; Dickison Mound #478
- E - Deuel, 1952, Plate IX, Fig. O; As above

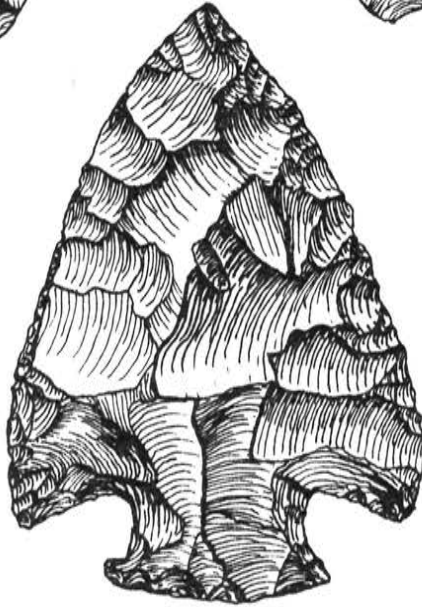
SNYDERS



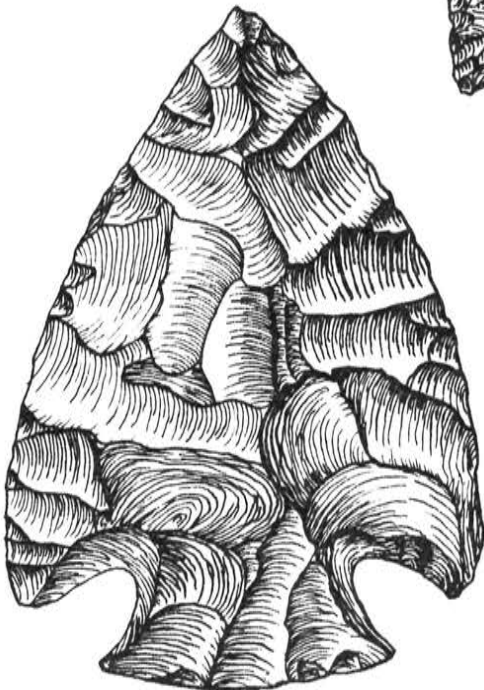
A



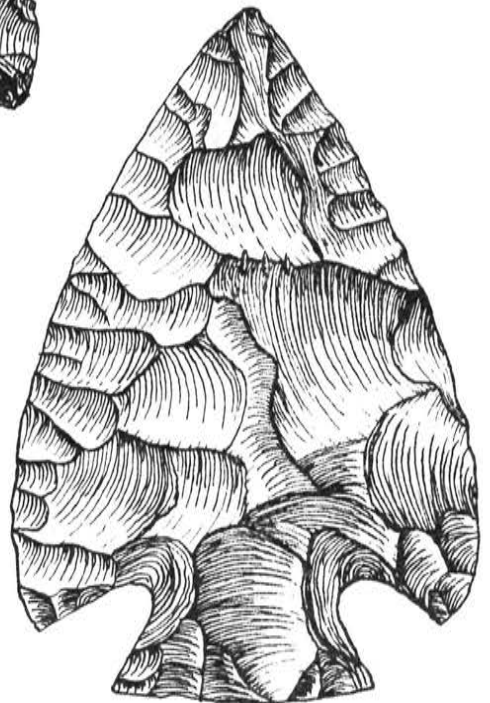
B



C



D



E

TALCO POINTS

The Talco point has been named by Suhm and Krieger (1954, p. 508) from types found in northeastern Texas.

Description

This type is a finely made triangular arrow point characterized by a recurved blade and a slightly concave base. Suhm and Krieger (1954) describe the Talco point as follows: "Slender triangular points with edges occasionally almost straight but usually recurved with constriction approximately in middle. Bases almost always concave. Workmanship extremely fine, blades thin and flat. Edges commonly minutely serrated, tips often slimmed down to a needle-like point."

In size, this type ranges from about 3/4 to 2 inches in length with many specimens averaging about 1 1/2 inches.

Distribution

The type is found in the Caddoan area. Suhm and Krieger (1954) list it as being found in the northern parts of East Texas, especially in the upper drainage of the Sabine and Sulphur Rivers. From here the type extends northward to the Red River valley and eastward into Arkansas. It is found in Oklahoma, particularly in the southeastern part of the state.

Age and Cultural Affiliation

The estimated age for the Talco point is from 1200 A. D. to 1500 A. D. (Suhm and Krieger, 1954).

It is associated with the Fulton Aspect in the Caddoan Area and occurs as a common type in the Titus Focus of Texas.

Remarks

The Talco point is similar to the Maud point except that the bases are not so deeply concave and the blade edges are more consistently recurved. The type is commonly found in caches associated with burials as funeral offerings. Specimens C, E and K are especially characteristic examples of the type.

Source of Plate Illustrations

The drawings were all made from Texas specimens supplied by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 1E-135-1P	G - 1E-135-29j
B - 1E-135-24R	H - 1E-135-24e
C - 1E-135-24g	I - 1E-135-29n
D - 1E-135-241	J - 1E-135-20b
E - 1E-135-28c	K - 1E-135-29f
F - 1E-135-28a	

TALCO



A



B



C



D



E



F



G



H



I



J



K

TORTUGAS POINTS

Suhm and Krieger (1954, p. 482) have suggested the name Tortugas for three triangular points formerly called Baird Beveled Blade, Taylor Thinned Base and Tortugas Triangular Blade by Kelley (1947).

Description

The Tortugas point is a heavy triangular dart point. Suhm and Krieger (1954) describe the type as follows: "Large triangular blade with no stem and edges usually straight to slightly convex; occasionally they may be slightly concave or recurved. Very frequently beveled along right edge on both faces; occasionally beveled along left edge or on all four edges. Bases straight to concave as a general rule; slight convexity may be allowed but definite convexity would place similar specimens in Abasolo type. Thinning of base common, with short longitudinal flakes removed, sometimes large flakes giving effect like fluting."

In size the length ranges from around 1½ inches to 3 inches with lengths of about 2 inches being most typical.

Distribution

According to Suhm and Krieger (1954) the type is wide spread in Texas and is found in Coastal, Central and Southwest Texas. Similar points are found in Oklahoma and various other parts of the United States.

Age and Cultural Affiliation

An estimated age for the Texas Tortugas points ranges from 4000 B. C. up to perhaps 1000 A. D. (Suhm and Krieger, 1954). They are found in the Falcon Focus, Mier Focus, Aransas Focus, Edwards Plateau Aspect and Pecos River Focus. They are more rare in other areas but do occur in the Alto Focus of East Texas.

Remarks

The Tortugas point is commonly found along with Abasolo, Matamoros and Catan points. The smaller ones tend to overlap with the Matamoros type which is essentially a small Tortugas point.

Source of Plate Illustrations

All drawings have been made from original specimens found in Star County, Texas. They are in the University of Oklahoma Stovall Museum collections. The catalog numbers on all specimens are TX-2.

TORTUGAS



A



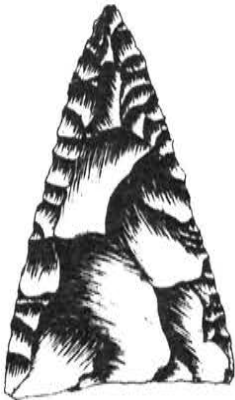
B



C



D



E



F



G



H



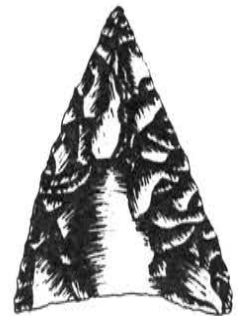
I



J



K



L

TRAVIS POINTS

The Travis point has been named and described by Suhm and Krieger (1954, p. 484) from types found in central Texas.

Description

This is a rectangular dart point characterized by an absence of barbs and poorly defined shoulders. Suhm and Krieger (1954) describe the type as follows: "Slender triangular to leaf-shaped blade, edges straight to convex. Many specimens have tip slimmed down to needle-like point. Shoulders very slight and rounded. Stem usually rectangular with parallel edges, but may expand or contract slightly. Base usually straight but may be slightly concave or convex."

In size, the Travis point ranges from about 2 inches to $3\frac{1}{2}$ inches with the average falling between $2\frac{1}{2}$ and 3 inches. The stem is reasonably long, forming from $\frac{1}{5}$ to $\frac{1}{3}$ of the total length.

Distribution

Suhm and Krieger (1954) report the type as being found chiefly throughout central Texas, but with occasional examples occurring in the surrounding areas. Examples are found in Oklahoma.

Age and Cultural Affiliation

The type apparently lasts for a long time period, throughout the entire span of the Edwards Plateau Aspect - perhaps from 4000 B. C. to 500 or 1000 A. D. (Suhm and Krieger, 1954).

It is a major type of the Archaic Edwards Plateau Aspect in central Texas. The affiliations in Oklahoma are not established.

Remarks

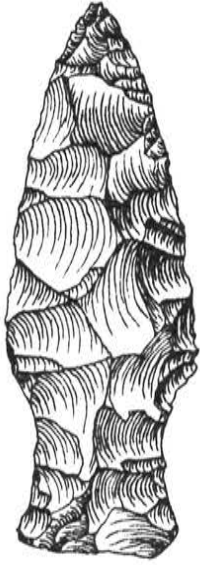
The Travis point has a close resemblance to some other types. Specimens having a concave base resemble the Darl type but are larger in size and lack the beveling and stem grinding. The Travis point resembles some examples of Nolan in outline but lack the beveled stem. They are narrower and have less prominent shoulders than the Lange type (Suhm and Krieger, 1954). Figure A represents a typical example.

Source of Plate Illustrations

All drawings were made from actual specimens found in Texas and furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 5-24-5233-d	G - 5-24-5221-b
B - 5-24-5220-m	H - 5-24-5233-E
C - 5-24-5231-g	I - 5-24-5099j
D - 5-24-5099-b	J - 5-24-5262-d
E - 5-24-5232-a	K - 5-24-5231-i
F - 5-24-5262-a	

TRAVIS



A



B



C



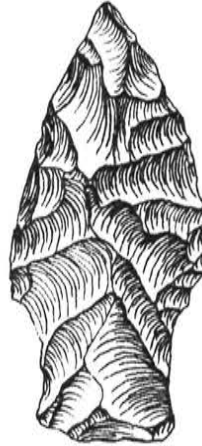
D



E



F



G



H



I



J



K

TRINITY POINTS

The Trinity point has been named by Robert L. Stephenson (1949, p. 56) from types found in the Lavon and Garza - Little Elm reservoirs of North Texas. Stephenson referred to the type as "Trinity Stemmed".

Description

The Trinity point is a small to medium sized dart point characterized by broad shallow side notches and a ground base. Suhm and Krieger (1954, p. 484-485) describe the type as follows: "Blade triangular with edges straight to convex. Shoulders poorly developed due to stem being formed by two long shallow notches, crudely chipped. Stem broad, bulging laterally so as to align with blade edges, or nearly so. Base straight to strongly convex. Stem edges sometimes smoothed. Base occasionally so."

In size, the Trinity point ranges from about 1 1/8 to 2 1/4 inches with most examples falling between 1 1/2 and 2 inches.

Distribution

Suhm and Krieger (1954) list the Trinity point as "apparently most common in Dallas area in valleys of East Fork and Trinity River, extending into northeast Texas and southward toward Brazos River."

The type is found in Oklahoma and appears to be most common in the Lake Texoma region of Red River.

Age and Cultural Affiliation

The estimated age for Trinity points is from about 2000 to 1000 B. C. (Crook and Harris, 1952).

The type is a common form in the Carrollton Focus, Trinity Aspect, Archaic period. Suhm and Krieger (1954) also note its occurrence in the East Texas Aspect. The cultural association of Oklahoma specimens is not established.

Remarks

Specimens B and H are typical examples of the type. Most of the Trinity points exhibit heavy grinding or smoothing along the base and along the sides of the stem including the notches. The type is relatively crude in workmanship and is apt to be heavy and thick in cross-section.

Source of Plate Illustrations

All drawings were made from the original specimens. Figures A through J were furnished by R. K. Harris of Dallas, Texas. Figures K through O were supplied by James Mayfield of Norman, Oklahoma. The catalog numbers are as follows:

A - 27A5-12	Wood Pit site	G and I - 392/De6	Lake Dallas site
B - 392/De6/145	Lake Dallas	H - 27A1-18	Wheeler site
C - 2702-1	Edwards site	K, M & N - Ma-3	Marshall County, Okla.
D - 392/De6/137	Lake Dallas	L - Ma-1	Marshall County, Okla.
E - 27B8-4	Kaufman site	O - Ma-4	Marshall County, Okla.
F and J - 27A9-18	Chamness site		

WASHITA POINTS

The name Washita is hereby suggested for one of the sub-types included by Suhm and Krieger (1954, p. 500) under the term Harrell.

Description

The Washita point is a small side notched triangular arrowhead. The edges are usually straight or slightly convex. The base is straight or slightly concave. There are two side notches, one on each side, which are cut in from the edge perhaps 1/4 to 1/3 of the distance from the base to the tip. In some examples the notches are almost in the center of the triangle, resulting in an unusually large basal or stem area. In almost all examples, the base forms the widest part of the point with the stem edges tapering gently to merge with the edges of the blade.

In size, the Washita points normally range from about 5/8 of an inch to 1 1/8 inches long with the majority of specimens averaging slightly less than 1 inch in length.

Distribution

The Washita point is found throughout most areas in Oklahoma, although it is especially common in the central and western parts of the state. It also occurs in most parts of the Great Plains, eastward into the Mississippi valley and westward into the Southwest. It is commonly associated with the Harrell point, pottery and agriculture.

Age and Cultural Affiliation

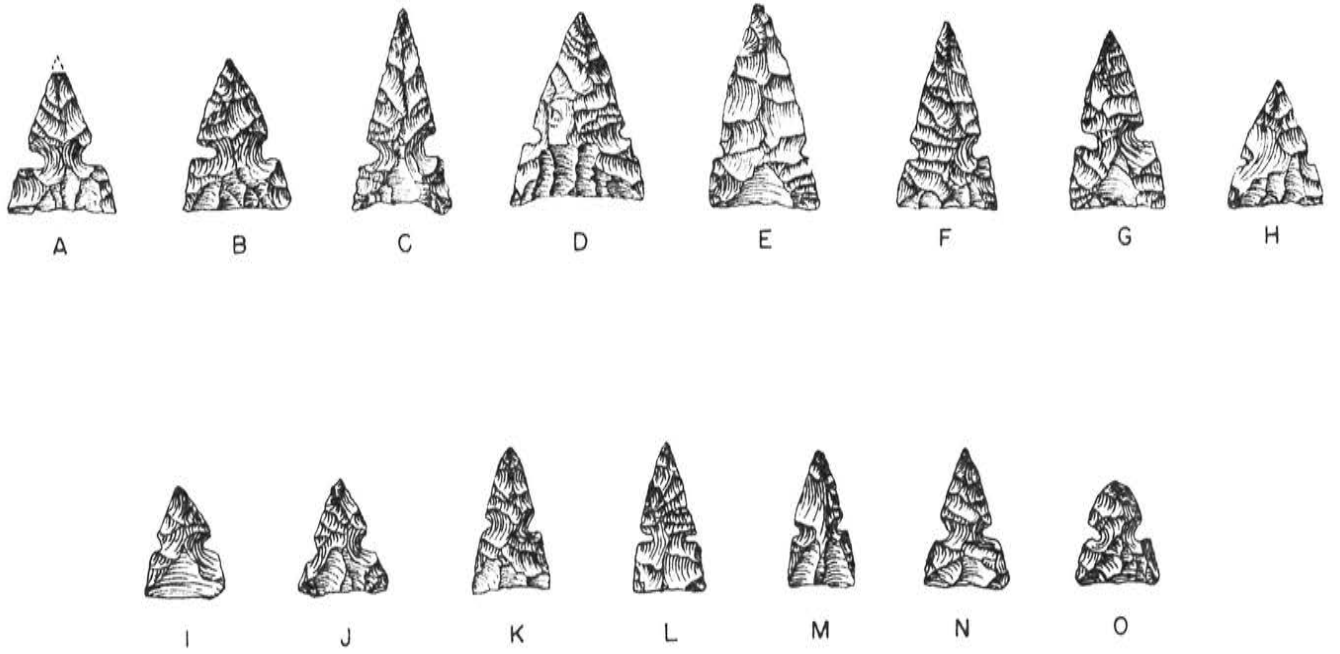
The Washita type is a late prehistoric point having an estimated age ranging from perhaps 1100 or 1200 A. D. up to 1500 or 1600 A. D. It is a characteristic projectile point in the Washita River, Custer and Optima Foci of Oklahoma. Elsewhere it appears to be associated with the sedentary Plains cultures, Anasazi or the Mississippian horizons.

Source of Plate Illustrations

All examples were drawn from the original Oklahoma specimens in the University of Oklahoma Stovall Museum collections. The specimen numbers and site localities are as follows:

A - Gd-1/1 Grady county	H - Gv-3 Garvin county
B - Gv-4/5 Garvin county	I - Gd-1/74 Grady county
C - Gv-9/26 Garvin county	J - Gd-1/8 Grady county
D - Gv-3/40 Garvin county	K - Gd-1/59 Grady county
E - Cd-1/52 Caddo county	L - Gd-1/1 Grady county
F - Gv-4/6 Garvin county	M - Gd-1/67 Grady county
G - Gd-1/54 Grady county	N - Gv-3/39 Garvin county
	O - Gd-1/59 Grady county

WASHITA



WELLS POINTS

The Wells point has been named by Newell and Krieger (1949, p. 167) from types found at the Davis site in Cherokee County, Texas.

Description

This type is characterized chiefly by the long contracting stem. Suhm and Krieger (1954, p. 488) describe the Wells point as follows: "Slender triangular blade with edges usually straight, sometimes slightly convex. Shoulders small, sometimes missing on one or both edges, occasionally jut out, but not barbed. Most characteristic feature is very long stem, usually contracted but may approach being parallel-edged. Base nearly pointed in some cases but rounded in others; occasionally concave. Stem edges usually ground smooth. Blade edges often serrated."

In size, the type ranges from about 1 3/4 to 3 1/4 inches with most specimens being around 2 1/2 inches long. The stem is often about 1/2 of the total length and is seldom less than 1/3 of the length.

Distribution

The type is found chiefly in Texas, especially the central part of eastern Texas and westward into central Texas (Suhm and Krieger, 1954). Specimens are found occasionally in Oklahoma, particularly in the Red River area of the central part of the state.

Age and Cultural Affiliation

Suhm and Krieger (1954) give an estimated age of from 1000 B. C. up to 1000 A. D. or some part thereof.

The type is found primarily in the East Texas Aspect of the Archaic period, surviving into the Alto Focus of Gibson Aspect. It also occurs infrequently in the Archaic Edwards Plateau Aspect (Suhm and Krieger, 1954).

Remarks

The Wells point is of poor to average workmanship and is likely to be fairly heavy and thick in cross-section. Oklahoma examples are normally found on non-pottery sites in what appears to be an Archaic context. Specimens labeled B and C represent fine examples of the type.

Source of Plate Illustrations

All drawings were made from the original specimens found in Texas. Specimens A through F were furnished by R. K. Harris of Dallas, Texas. Specimens G through L were furnished by Tom Campbell, Department of Anthropology, University of Texas, Austin, Texas. The catalog numbers are as follows:

A - 27A1-18 Wheeler site	G - 27A5-12
B - 27A6-13 Obschner site	H - 5-14-3757-a
C - 27A3-11 Walnut site	I - 27A1-18
D - 27A6-13 Obschner site	J - 1C-33-76
E - 27A6-13 Obschner site	K - 5-24-5549-b
F - 392/De6/53 Lake Dallas site	L - 52C1-5/731

WELLS



A



B



C



D



E



F



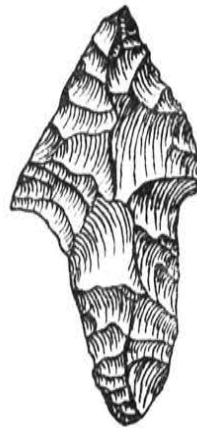
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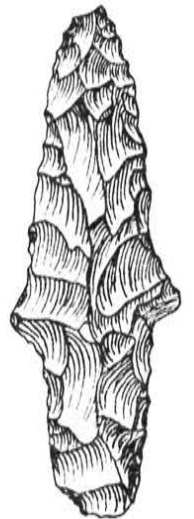
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BIBLIOGRAPHY

- Baerreis, David A.
 1951 The Preceramic Horizons of Northeastern Oklahoma, Anthropological Papers, Museum of Anthropology, University of Michigan, No. 6, pp. 1-121.
 1954 The Huffaker Site, Delaware County, Oklahoma, Bulletin Oklahoma Anthropological Society, Vol. 2, pp. 35-48.
- Baerreis, Davis A., Joan E. Freeman & James V. Wright
 1958 The Contracting Stem Projectile Point in Eastern Oklahoma, Bulletin Oklahoma Anthropological Society, Vol. 6, pp. 61-82
- Baker, William E., T. N. Campbell & Glen L. Evans
 1957 The Nall Site: Evidence of Early Man in the Oklahoma Panhandle, Bulletin Oklahoma Anthropological Society, Vol. 5, pp. 1-20
- Barbour, E. H. & C. Bertrand Schultz
 1932 The Scottsbluff Bison Quarry and Its Artifacts, Nebraska State Museum Bulletin 34, Vol. 1
- Bell, Robert E.
 1952 Indian Arrowheads, Archaeological Newsletter, Vol. 3, No. 1, pp. 1-12, January.
 1954 Projectile Points from West-Central Oklahoma: Dan Base Collection, Bulletin Oklahoma Anthropological Society, Vol. 2, pp. 11-18
 1957 Some Oklahoma Projectile Point Examples, Newsletter Oklahoma Anthropological Society, Vol. 5, No. 8, p. 2, Figure A, February.
- Bell, Robert E. & Charlene Dale
 1953 The Morris Site, Ck-39, Cherokee County, Oklahoma, Bulletin Texas Archaeological Society, Vol. 24, pp. 69-140.
- Bell, Robert E. & Roland S. Hall
 1953 Selected Projectile Point Types of the United States, Bulletin Oklahoma Anthropological Society, Vol. 1, pp. 1-16.
- Chapman, Carl H.
 1948 A Preliminary Survey of Missouri Archaeology Part IV, The Missouri Archaeologist, Vol. 10, Part 4, pp. 135-164.
- Chapman, Carl H. & Leo O. Anderson
 1955 The Campbell Site, A Late Mississippi Town Site and Cemetery in Southeast Missouri, The Missouri Archaeologist, Vol. 17, Nos. 2-3, pp. 1-120
- Crane, H. R.
 1956 University of Michigan Radiocarbon Dates: 1, Science, Vol. 124, No. 3224, pp. 664-672.
- Crook, Wilson W., Jr.
 1952 The Wheeler Site: A 3500 year old Culture in Dallas County, Texas, Field and Laboratory, Vol. 20, No. 2, pp. 43-65.
- Crook, Wilson W., Jr. & R. K. Harris
 1954 Traits of the Trinity Aspect Archaic: Carrollton and Elam Foci, The Record, Dallas Archaeological Society, Vol. 12, No. 1, pp. 2-13.
 1957 Hearths and Artifacts of Early Man Near Lewisville, Texas, and Associated Faunal Material, Bulletin Texas Archaeological Society, Vol. 28, pp. 7-97.
- Davis, E. Mott
 1953 Recent Data from Two Paleo-Indian Sites on Medicine Creek, Nebraska, American Antiquity, Vol. 18, No. 4, pp. 380-386.
- Deuel, Thorne (Editor)
 1952 Hopewellian Communities in Illinois, Illinois State Museum Scientific Papers, Vol. 5.
- Figgins, J. D.
 1934 Folsom and Yuma Artifacts, Proceedings Colorado Museum of Natural History, Vol. 13, No. 2.
- Ford, James A. & Clarence Webb
 1956 Poverty Point, A Late Archaic Site in Louisiana, American Museum Natural History Anthropological Papers, Vol. 46, Part 1, pp. 1-136.
- Ford, James A., Philip Phillips & William G. Haag
 1955 The Jaketown Site in West Central Mississippi, American Museum Natural History Anthropological Papers, Vol. 45, Part 1, pp. 1-164.
- Hall, Roland S.
 1954 Ck-44: A Bluff Shelter Site from Northeastern Oklahoma, Bulletin Oklahoma Anthropological Society, Vol. 2, pp. 49-67.
- Hibben, Frank C.
 1941 Evidences of Early Occupation in Sandia Cave, New Mexico, and other Sites in the Sandia-Manzano Region, Smithsonian Miscellaneous Collections, Vol. 99, No. 23, pp. 1-64.
 1946 The First Thirty-eight Sandia Points, American Antiquity, Vol. 11, No. 4, pp. 257-258.
- Holmes, William Henry
 1903 Flint Implements and Fossil Remains from a Sulphur Spring at Afton, Indian Territory, Report of National Museum for 1901, pp. 233-252.
- Howard, Edgar B.
 1935 Evidence of Early Man in North America, The Museum Journal, Vol. 24, Nos. 2-3.
- Kelley, J. Charles
 1947 The Lehmann Rock Shelter: A Stratified Site of the Toyah, Uvalde, and Round Rock Foci, Bulletin Texas Archaeological Society, Vol. 18, pp. 115-128.
 1947a The Cultural Affiliations and Chronological Position of the Clear Fork Focus, American Antiquity, Vol. 13, No. 2, pp. 97-108.
- Kelley, J. C., T. N. Campbell & D. J. Lehmer
 1940 The Association of Archaeological Materials with Geological Deposits in the Big Bend Region of Texas, West Texas Historical and Scientific Society No. 10.
- Kneberg, Madeline
 1956 Some Important Projectile Point Types Found in the Tennessee Area, Tennessee Archaeologist, Vol. 12, No. 1, pp. 17-28.

- Krieger, Alex D.
 1946 Cultural Complexes and Chronology in Northern Texas, University of Texas Publication No. 4640, pp. 1-366.
 1947 Certain Projectile Points of the Early American Hunters, Bulletin Texas Archaeological and Paleontological Society, Vol. 18, pp. 7-27.
 1957 Early Man, Notes and News, American Antiquity, Vol. 22, No. 3, pp. 321-323.
- Lewis, Tom M. N.
 1955 The Hamilton and Eva Type Points of Tennessee, Bulletin Oklahoma Anthropological Society, Vol. 3, pp. 69-70.
- Lewis, T. M. N., & Madeline Kneberg
 1947 The Archaic Horizon in Western Tennessee, Tennessee Anthropology Papers No. 2.
- Libby, Willard F.
 1952 Radiocarbon Dating.
 1954 Chicago Radiocarbon Dates V, Science, Vol. 120, Number 3123, pp. 733-742.
 1955 Radiocarbon Dating.
- Newell, H. Perry & Alex D. Krieger
 1949 The George C. Davis Site, Cherokee County, Texas, American Antiquity, Vol. 14, No. 4, Part 2.
- Ray, Cyrus N.
 1938 The Clear Fork Culture Complex, Bulletin Texas Archaeological and Paleontological Society, Vol. 10, pp. 193-207.
- Ritzenthaler, Robert E.
 1946 The Osceola Site, Wisconsin Archaeologist, N. S. Vol. 27, No. 3, September.
- Roberts, Frank H. H.
 1934 Scientist Describes True Folsom Points, The Literary Digest, Vol. 118, No. 4
 1936 Additional Information on the Folsom Complex, Smithsonian Miscellaneous Collections, Vol. 95, No. 10.
- Roosa, William B.
 1956 The Lucy Site in Central New Mexico, American Antiquity, Vol. 21, No. 3, p. 310.
- Scully, Edward G.
 1951 Some Central Mississippi Valley Projectile Point Type, Museum of Anthropology, University of Michigan, Mimeographed.
- Sellards, E. H.
 1952 Early Man in America
 1955 Fossil Bison and Associated Artifacts from Milnesand, New Mexico, American Antiquity, Vol. 20 No. 4, Part 1, pp. 336-344, April.
- Sellards, E. H., Glen L. Evans & G. E. Meade
 1947 Fossil Bison and Associated Artifacts from Plainview, Texas, Bulletin Geological Society of America, Vol. 58, pp. 927-954.
- Stephenson, Robert L.
 1949 Archaeological Survey of Lavon and Garza-Little Elm Reservoirs, A Preliminary Report, Bulletin Texas Archaeological and Paleontological Society, Vol. 20, pp. 21-62.
- Subm, Dee Ann & Alex D. Krieger
 1954 An Introductory Handbook of Texas Archeology, Bulletin Texas Archeological Society, Vol. 25, pp. 1-562.
- Webb, Clarence H.
 1946 Two Unusual Types of Chipped Stone Artifacts from Northwest Louisiana, Bulletin Texas Archaeological and Paleontological Society, Vol. 17, pp. 9-17.
 1948 Caddoan Prehistory: The Bossier Focus, Bulletin Texas Archaeological and Paleontological Society, Vol. 19, pp. 100-147.
 1955 Comments Concerning the East Texas Section of "An Introductory Handbook of Texas Archeology", Bulletin Texas Archeological Society, Vol. 26, pp. 259-271.
- Webb, William S. & Raymond S. Baby
 1957 The Adena People No. 2, Ohio Historical Society.
- Wheeler, Richard Page
 1952 A Note on the McKean Lanceolate Point, Plains Archaeological Conference Newsletter, Vol. 4, No. 4, pp. 45-50, March.
 1954 Selected Projectile Point Types of the United States: II, Bulletin Oklahoma Anthropological Society, Vol. 2, pp. 1-6.
- Wise, Edward N., & Dick Shutler, Jr.
 1958 University of Arizona Radiocarbon Dates, Science, Vol. 127, pp. 72-74, January.
- Wormington, H. M.
 1949 Ancient Man in North America, Denver Museum of Natural History Popular Series No. 4, 3rd edition.
 1967 Ancient Man in North America, Denver Museum of Natural History Popular Series No. 4, 4th edition.