

1969

## Middle Archaic Complex of Northwest Arkansas

Michael A. Beckman

*University of Arkansas, Fayetteville*

Follow this and additional works at: <http://scholarworks.uark.edu/jaas>

 Part of the [Sedimentology Commons](#)

---

### Recommended Citation

Beckman, Michael A. (1969) "Middle Archaic Complex of Northwest Arkansas," *Journal of the Arkansas Academy of Science*: Vol. 23 , Article 34.

Available at: <http://scholarworks.uark.edu/jaas/vol23/iss1/34>

This article is available for use under the Creative Commons license: Attribution-NoDerivatives 4.0 International (CC BY-ND 4.0). Users are able to read, download, copy, print, distribute, search, link to the full texts of these articles, or use them for any other lawful purpose, without asking prior permission from the publisher or the author.

This Article is brought to you for free and open access by ScholarWorks@UARK. It has been accepted for inclusion in Journal of the Arkansas Academy of Science by an authorized editor of ScholarWorks@UARK. For more information, please contact [scholar@uark.edu](mailto:scholar@uark.edu), [ccmiddle@uark.edu](mailto:ccmiddle@uark.edu).

## MIDDLE ARCHAIC COMPLEX OF NORTHWEST ARKANSAS

Michael A. Beckman

Dept. of Geology, University of Arkansas

### *Purpose*

After the end of the Wisconsin glacial there occurred an interval called the Neothermal in the southwestern portion of the United States. The Neothermal is comprised of three consecutive temperature intervals: the Anathermal, Altithermal, and Medithermal, respectively characterized by rising, maximum, and moderate temperature. The Altithermal was the only period of extreme arid climate which has existed in North America since the Mankato glacial substage (Antevs 1955). During this "long drought" Arkansas developed a typical desert environment characterized by round clumps of bushes which gave rise to prairie mounds (Quinn 1961), and extensive alluviation took place. Contained within alluvial material deposited during the Altithermal are artifacts of the people who lived and hunted in the dry climate of that day. It is through projectile points collected from the alluvium that an age determination of the alluvium will be made.

### *Procedure*

After many hours of searching alluvial material one datable point was finally discovered. This point is shown in Figure 2, point number 30. It was therefore decided that points in a collection accumulated by Dr. James H. Quinn would be used. This collection will be referred to hereafter as the basic collection. Points of the basic collection were discovered in alluvial material or in stream beds of the Fayetteville City Park (Figure 4), or Town Branch Creek. Various people contributed artifacts over a period of years; thus information concerning their discovery sites depth of burial, and exact association with the alluvial material is not known. It will be assumed that all points came from the alluvial material. To correct for possible contamination of points, categories which were not represented by two or more points were not considered to have come from the alluvial deposit. In addition, more weight in determining the age of the deposits will be given to six points which are known to have been discovered within alluvial material. These six points (Figure 2, points No 27-32) came from the same alluvial deposit in the Fayetteville City Park (Figure 4); points ranged in depth of burial from three feet (point 30) to six feet (point 32) below the present surface. The six points from the City Park represent four projectile point styles. These styles constitute eighty-one percent of all projectile points present in the basic collection. Perhaps the other nineteen percent represent points which were not in true association

with the alluvium. W. W. Cook and R. K. Harris (1952) stated that ten percent of all the points used by Archaic Indians of the Carrollton Foci were points of an older time period. If this were true only nine percent of the points in the basic collection represent contamination.

As a basis for projectile point classification a Masters' thesis by James A. Scholtz (1967) was used. His thesis on artifacts in the Beaver Reservoir area in northwest Arkansas was extremely helpful. The four styles represented by the six points from the City Park are of the following general categories: Basal-Notched, Straight-Stem, and Contracting-Stem types Two and Three. The most abundant point style discovered in association was the Basal-Notched type. The various point styles will be discussed in detail later.

In addition to the basic collection, points from an occupation site (number 3WA107) near the spillway of Lake Sequoyah were used. The occupation site was brought to the writer's attention by Dr. Mike Hoffman. Only Basal-Notched points were collected from the site. Associated with artifacts of the site are large quantities of organic material which is suitable for  $C_{14}$  dating. Organic material associated with the artifacts was collected and it is hoped that a  $C_{14}$  date can be determined.

The artifacts of the Lake Sequoyah site are contained in a fine-grained alluvial deposit (Figure 5). Within the fine-grained material are isolated groups of stones (Figure 6). These stones do not occur throughout the deposit but are confined to small areas in the deposit. Some of the stones if not all of them were carried to their present location by people who occupied the site. This can be concluded from several lines of evidence. First one stone was collected which had a depression pecked into it. This stone is believed to have been used in cracking nuts. Secondly, many of the stones in the alluvial deposit appear to be heat cracked by fire. Thirdly, the presence of relatively large stones contained in isolated patches in the fine-grained alluvial deposits indicates the stones were carried in. The purpose of the stones is somewhat questionable. They may have been used for stone water boiling, grinding stones, or hearth stones. If some of these stones are in fact Archaic hearths the Lake Sequoyah site would be one of the few examples of hearths of such an age.

Occupation of the Lake Sequoyah site occurred penecontemporaneously with the deposition of the alluvial material. It is possible that the alluvium was first deposited as loess and later washed from the surrounding hills as the climate of the Altithermal became wetter. If this were true the point styles characteristic of the site would represent a time after the peak of the Altithermal. Points from the late site are shown in Figure 2, number 24-26.

*Middle Archaic Complex of Northwest Arkansas*

---

POINT STYLES OF THE SIX POINTS FROM THE  
FAYETTEVILLE CITY PARK

*Basal-Notched*

**Basic description:** Generally a broad basally notched projectile point with long barbs and expanding base.

**General form:** The blade is most often wide in relation to the lengths of the specimens with the exception of point number 28, Figure 2. Barbs are long and massive, and were produced by chipping deep notches into the base of the point blank. These notches are narrow and U-shaped. The notches are cut at an angle ranging from ten to thirty degrees from the long axis of the point. The bases of the points are straight, round, or convex.

Basal-Notched points are characteristic of both the Fayetteville City Park and the Lake Sequoyah site. This point style is believed to range from late Early Archaic to Woodland. (Scholtz).

In the south central United States basal-notched points have been described in quite early early context; however the style's upward range is somewhat questionable. The basally notched point is the principal point type of Early Middle Archaic Era, which is believed to have lasted from 6,000 to 4,000 B.C. (Marshall). Some authors have suggested that the point style may have been present as late as 1,000 B.C.

*Straight-Stem*

**Basic description:** A broad, medium sized projectile point with a slightly expanding stem and concave base. (Scholtz).

**General form:** Only one specimen of this type was discovered. It has a broad blade, in relation to its length. The blade edges curve thus producing a convex outline, with the maximum width occurring at the shoulders. The shoulders are short with very slight barbs. The stem expands slightly toward the concave base portion of the point.

The one point which was collected is shown in Figure 2, point number 32. The point was located within the coarse alluvium in the Fayetteville City Park and was some four to five feet below the surface.

Straight-Stemmed points appear to belong to an undefined projectile point type present in western Arkansas and possibly in Oklahoma (Scholtz). The closest comparable form is the *Jakie Stemmed* type described by Marshall (Marshall 1958: 109-110). Marshall lists *Jakie Stemmed* points as having an "Early and perhaps Middle Archaic" cultural affiliation.

### *Contracting Stem*

Two types of Contracting Stem points were found. The difference between the two lies in the base. One type has a round base while the other's base is concave.

#### *Contracting Stem Type Three*

Basic description: A dart point with a contracting stem and a concave base (Figure 2, point number 31).

General form: The blade has a straight outline, with one point slightly recurved (concave-convex). One point, figure 1, point 14, has been reworked and used as a drill. The widest portion of the point is at its shoulders. The shoulders tend to be short and slope gently in to the stem, thus omitting the barbs. The stem contracts toward the base, which is concave.

Contracting Stem Type Three has been called by Marshall, *Standlee Contracting Stemmed* and is present in both the Fayetteville City Park and the basic collection (Figure 1, points 12-14, and Figure 2, point 31). *Standlee Contracting Stemmed* type is culturally affiliated with the "later phase of Early Archaic and continues through the Woodland period and into Marginal Mississippi period" (Marshall 1938: 120-121).

#### *Contracting Stem Type Two*

Basic description: A contracting stem projectile point with a rounded base.

General Form: The blade edges are straight to convex, with one point recurved (convex-concave). Maximum width occurs at the shoulders, which vary from horizontal and pronounced to slight and curved concavely into a well-rounded base (Scholtz).

One point, of this category, was discovered in position in the alluvial material of the Fayetteville City Park. Point number 3, figure 2 was found three feet below the surface. It was located in a fine-grained material which lies above the coarser alluvium. Contracting Stemmed Type II points should have a range in time either extending past the end of the Altithermal or beginning after the peak Altithermal. Unfortunately this type of point has a relatively large range in time; according to Marshall its range "starts in the early part of Late Archaic and continues through the Woodland into the Mississippian".

### POINT STYLES NOT REPRESENTED BY THE SIX POINTS FROM THE FAYETTEVILLE CITY PARK, BUT PRESENT IN THE BASIC COLLECTION

Four categories of points were present in the basic collection

*Middle Archaic Complex of Northwest Arkansas*

that were not present in the points from the City Park. Styles that were not represented by two or more points were not considered, due to the possibility of contamination of points in the basic collection by older and younger points. Four dart points were excluded for this reason. They are shown in Figure 1, points 1,2,9, and 15. Their types and age indications are as follows: 1, *Plainview* type, Late PaleoIndian-Early Archaic; 2, pre-*Dalton* type, Early Archaic; 9, *Frio* type, minor Archaic; and 15, *Stone Corner Notched*, late Early Archaic to Woodland. General categories of point styles of the basic collection in quantities of two or more are Broad Corner Notched, Square Stemmed, and Corner Notched.

*Broad Corner Notched*

A small dart point with very broad corner notches and a slender expanding stem, giving the point a fir-tree outline (Scholtz). It has been called *Table Rock Stemmed* and is assigned to the "Middle Archaic" by Marshall. See Figure 1, points 16-18 for examples of *Table Rock Stemmed* points.

*Corner Notched*

Points of the Corner Notched type are medium-sized corner-notched points with pronounced shoulders which are most often barbed. The stem expands slightly and the base is straight to concave. The point is similar to the *White River Corner Notched* type but has a slightly concave base rather than a straight base (see Figure 1, points 6-8). The *White River Corner Notched* point has a wide range projectile points with smoothed stem and basal edges (Figure 1, continues through Woodland into the Marginal Mississippi period" (Marshall 1958: 123).

*Square Stemmed*

Square Stemmed points are large, shouldered, square-stemmed projectile points with smoothed stem and basal edges (Figure 1, points No. 19-23). These points conform closely to the description of the *Stone Square Stemmed* type defined by Marshall (1958: 110-112). Marshall regards this point type as having an Early and Middle Archaic cultural affiliation.

*Conclusions*

Five basic conclusions can be drawn from the data accumulated in this project.

1. The alluvial material from which the projectile points were collected was laid down during the Middle Archaic time period (6,000-3,000 B.C.). This can be seen from the graph of the ranges of point styles present in the entire artifact collection (Figure 3).

2. The Altithermal ended in northwest Arkansas by the be-

ginning of the Late Archaic period. This is evident from the range of *Standlee Contracting Stemmed* points. Point number 30, Figure 2 was found in position just above the alluvial material in the Fayetteville City Park and is of the *Standlee Contracting Stemmed* type.

3. If a  $C_{14}$  date could be obtained from the organic material contained in the Lake Sequoyah site a time for the geological sequence which resulted in the deposition of alluvial material at the Lake Site could be determined. This sequence is believed to represent a time after the peak of the Altithermal.

4. Prairie mounds in northwest Arkansas represent a surface feature formed between 4,000 and 3,000 B.C. Prairie mounds of northwest Arkansas were formed by the accumulation of wind-blown dust and sand particles in the bases of round clumps of bushes, are related to the arid climate of the Altithermal (Quinn). As the Altithermal died out precipitation increased. Increasing precipitation was accompanied by increasing plant cover. New plant cover growing on the prairie mounds effectively "froze" the mounds in their size, shape, and distribution. Because of increased plant cover the wind could no longer dislodge mound material to build new mounds or destroy old ones. This new plant cover also prevented deposition of new alluvium on the scale of that which occurred during the Altithermal. The youngest points contained in the alluvial material should therefore represent the approximate time at which the prairie mounds were "frozen".

5. The presence of Archaic points a few feet from the surface in alluvial material indicates that alluviation is not a continuous process, but a discontinuous one, with the process of alluviation being regulated by climate and plant cover.

*Middle Archaic Complex of Northwest Arkansas*

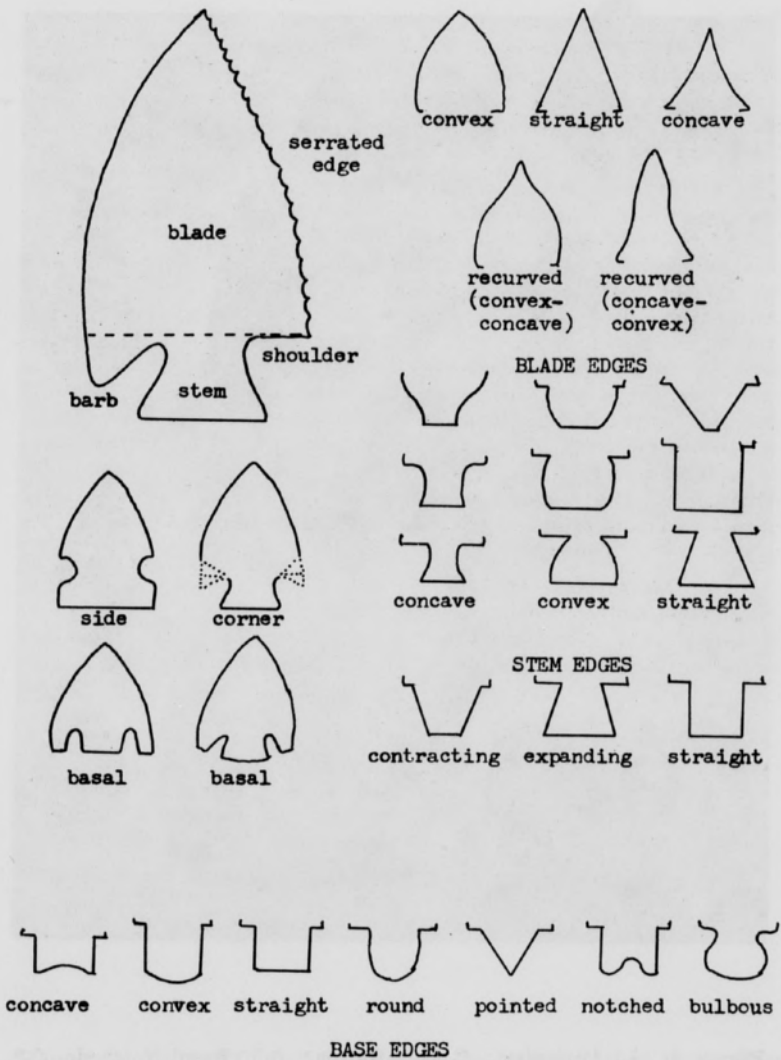


Figure A. Projectile point variation (from Scholtz)



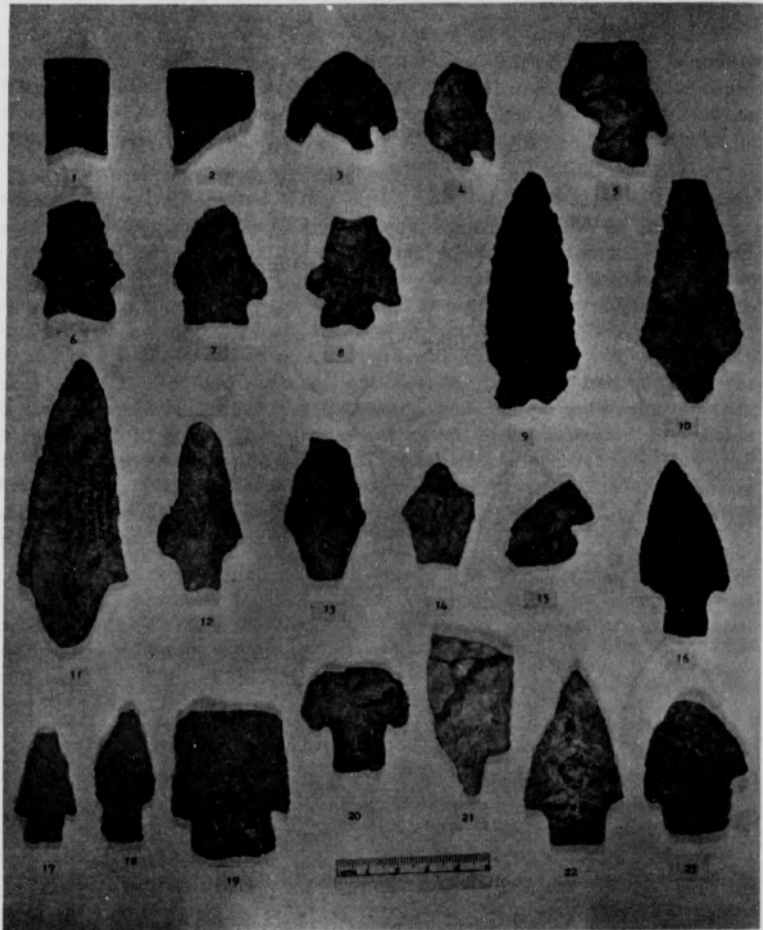


Figure 1. 1, Plainview; 2, pre-Dalton; 3-5 Basal-Notched; 6-8, Corner-Notched; 9, Frio; 10-11, Contracting Stem Type Three; 12-14 Contracting Stem Type Two; 15, Stone Corner Notched; 16-18, Table Rock Stemmed; 19-23, Stone Square Stemmed.

*Middle Archaic Complex of Northwest Arkansas*



**Figure 2.** PROJECTILE POINTS 24-26, Basal-Notched points from Lake Sequoyah site; 27-20, Basal-Notched points from Fayetteville City Park; 30, Contracting Stem type Three from City Park; 31, Contracting Stem type Two, City Park; 32 Straight-Stem, City Park.

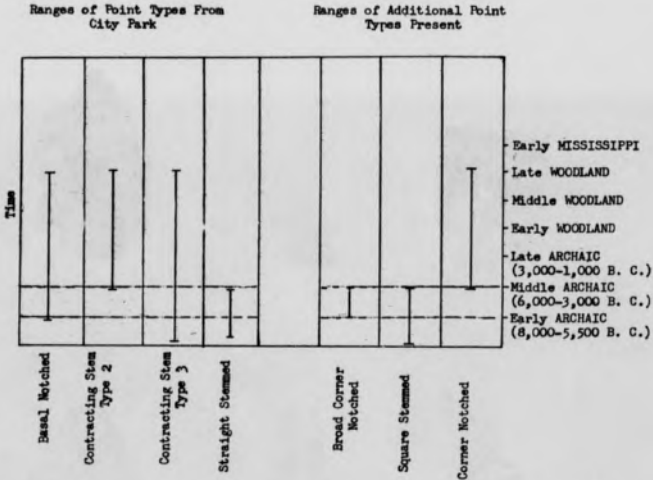


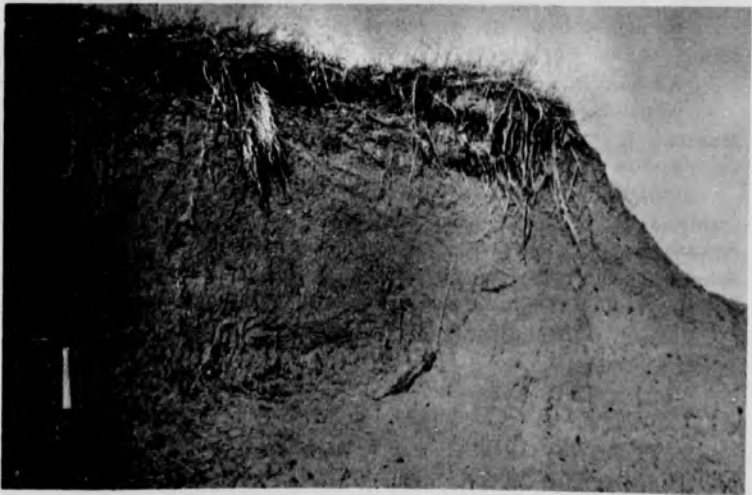
Figure 3. Showing range in time of point types present in Dr. Quinn's basic collection



Figure 4. Coarse alluvium and fine-grained alluvial material of the Fayetteville City Park, both types of material contain artifacts.

*Middle Archaic Complex of Northwest Arkansas*

---



**Figure 5.** Fine-grained alluvial material of the Lake Sequoyah site.



**Figure 6.** Fine-grained alluvial deposit of Lake Sequoyah site containing hearth stones (?).

## REFERENCES

- Antevs, Ernst (1955), Climatic Dating in the West, *American Antiquity*, vol. 20, no. 4, part I.
- Crook, W. W. Jr. and Harris, R. K. (1952), Trinity Aspect of the Archaic Horizon: The Carrollton and Elam Foci; *Texas Archeological and Paleontological Society*, vol. 23, October.
- Marshal, R. A. (1958), The Use of Table Rock Reservoir Projectile Points in Delineation of Cultural Complexes and their Distribution, M. A. thesis, University of Missouri, Columbia.
- Quinn, J. H. (1961), Prairie Mounds of Arkansas, *Newsletter of the Arkansas Archeological Society*, vol. II, no. 6, June.
- Scholtz, J. A. (1967), Survey of Beaver Reservoir Area in Northwest Arkansas, M. A. thesis, University of Arkansas, Fayetteville.