Variability Among Biface Caches from Southern and South Central Texas

Thomas R. Hester and David L. Calame, Sr.

ABSTRACT

Three biface caches from southern and south central Texas are documented in this article. Two of the caches, from Frio County, are of large, lanceolate bifaces that likely relate to the Angostura lithic style. The third cache, from Kinney County, consists of three massive bifaces whose cultural affiliation is uncertain. However, it may date to early in the regional cultural sequence.

INTRODUCTION

In this paper, we report two caches from Frio County, southern Texas (Figure 1), that we believe date to the Late Paleoindian period and are linked to the Angostura projectile point type. We further report a third cache from Kinney County in south central Texas (see Figure 1), distinguished by different kinds of bifaces of massive size. These have some attributes suggesting that they are "early" in the south central Texas chronological sequence.

Biface caches have been found in many areas of Texas and a number of these were documented in a Master's thesis by Kevin Miller (1993). Most, if not all, of these caches appear to date to the Archaic period. They often consist of dozens of bifaces, roughly triangular in outline, and greatly varying in size. Just a few examples include the Fairview cache (Miller 1993), the Curbo cache (Harry J. Shafer, personal communication), the Riley cache (Miller 1993), and the extensive Medina cache, now being studied by David L. Calame, Sr. An excellent example of the full publication of a biface cache is the study of the Hoerster cache from Mason County (Lintz and Saner 2002), which should also be consulted for a review of theories related to biface-caching behavior.

Of great interest in recent years have been several Clovis-age biface caches reported from the Western United States. Perhaps best known is the East Wenatchee (Richey) cache found in Washington state in the 1980s, and representing massive fluted Clovis bifaces (Gramley 1993). Other caches of this age have also been published, including the the Simons cache in Idaho (Woods and Titmus 1985) and the Fenn cache, possibly from Wyoming (Frison and Bradley 1999) In the latter cache, there was a mixture of large Clovis preforms, some fluted, some not, and earlier stage preforms that one guesses would have eventually been made into Clovis points. These, and other Clovis biface caches, have been surprising to archaeologists because of the size of many of the Clovis fluted preforms in the caches. Some have suggested that they were ritual or ceremonial deposits, perhaps associated with burials, or were simply flintknapper kits, the contents of which represent various stages in reduction for Clovis points. Kornfeld et al. (1990) believe that such caches may have been intentionally-stored resources to be utilized at a later date

THE CACHES

Kothmann Ranch Cache

The Kothmann Ranch cache (Figure 2) comes from the San Miguel Creek drainage in Frio County, Texas. According to the records of the late Dr. Pat Riley, whose family owned the ranch at one time, this cache was found between 1929-1934. Unfortunately, no further details are known; but, Dr. Riley

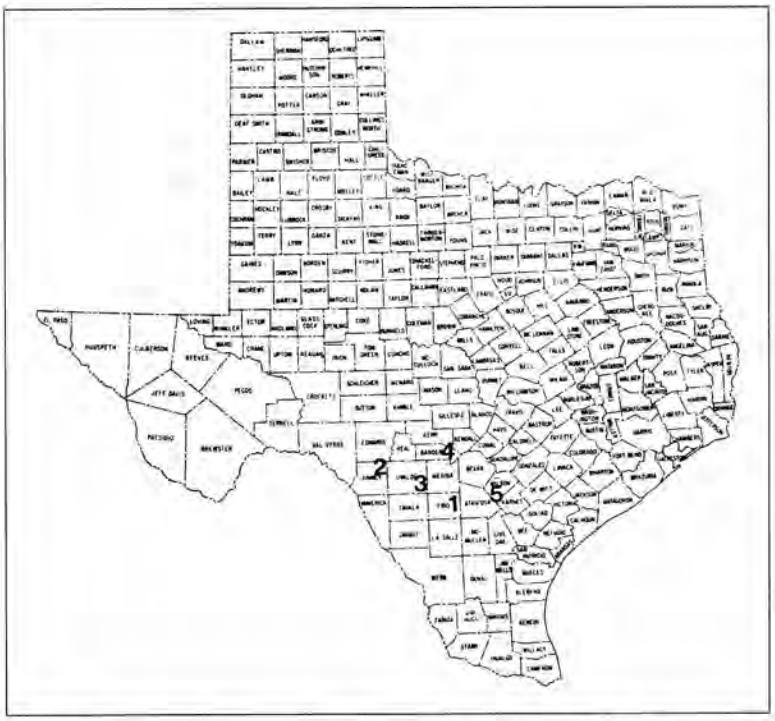

Figure 1. Locations of counties mentioned in the text. 1, Frio County; 2, Kinney County; 3, Uvalde County; 4, Bandera County; 5, Wilson County.

kept the cache together for several decades, and it was ultimately donated to the Texas Archeological Research Laboratory by his family in the 1990s.

Specimen 1 is the largest biface (see Figure 2) and it is broken in three places. It is made of a fine-grained gray chert that is glossy and darker in some areas, perhaps reflecting heat-treating. Though the tip is the darkest (moderate brown), the lower 9.3 cm of the biface seems to have much of the gloss, and in this area, it may well be polish related to hafting. This is reinforced by the presence of dulling along the lower portions of the lateral edges. There is also a slight bevel on the basal edge, as if a platform had been set up for further thinning of the base. Flaking is typified by broad parallel flakes on much of the biface, although the flakes are more narrow near the tip. The specimen is 29.0 cm in length, 4.8 cm at mid-section, and 1.4 cm in width at the base. The maximum thickness is 0.7 cm, though thickness ranges from 0.4-0.6 cm over much of the biface

The second specimen (see Figure 2), of grayish-brown chert, is unbroken. It also appears to be the most finished, with lateral edge smoothing or dulling on the lower 5.5 cm. Like the first specimen, there are slight bevels, or striking platforms, on the basal edge, which is not dulled. The flaking on one face mirrors that of the first specimen, while on the opposite side, the broad flakes near the base are not nearly as carefully removed. However, exceedingly fine parallel flaking is present at the distal end. This artifact is 24.6 cm long, 4.4 cm wide at mid-section, and 2.1 cm in width at the base. Thickness is 0.7 cm at its maximum, though much of the biface is 0.5-0.6 cm thick.

The biface designated as Specimen 3 (see Figure 2), made of light gray, glossy (heat-treated?) chert, is broken is two places, near the mid-section and distally. It also has breaks on the basal end and at the tip, as well as a nick in one edge near the mid-section. A patch of white cortex (2 x 3 cm in size) remains on one face at the base. The overall flaking pattern is very similar to the other two bifaces, with broad parallel flakes on the lower half and narrow parallel, to parallel-oblique, flakes on the distal end. Noting that the tip and the basal edge are broken, the length of the biface is 21.6 cm long. It is 3.8 cm in width near the mid-section and the broken basal edge is 2.5 cm wide. Maximum thickness is 0.7 cm, although much of the biface measures 0.6 cm in thickness. There is no lateral edge dulling on the specimen.

Knothole Cache

In 1998, David Calame was able to obtain information on a cache of two large bifaces from far northern Frio County, and like the Kothmann Cache, along the San Miguel drainage. These specimens, known as the Knothole Cache (41FR33, Figure 3), were found in 1973 by workmen digging a garbage pit; they brought them to the attention of the ranch owner, who did further excavation at the find spot and took color photographs of the manner in which

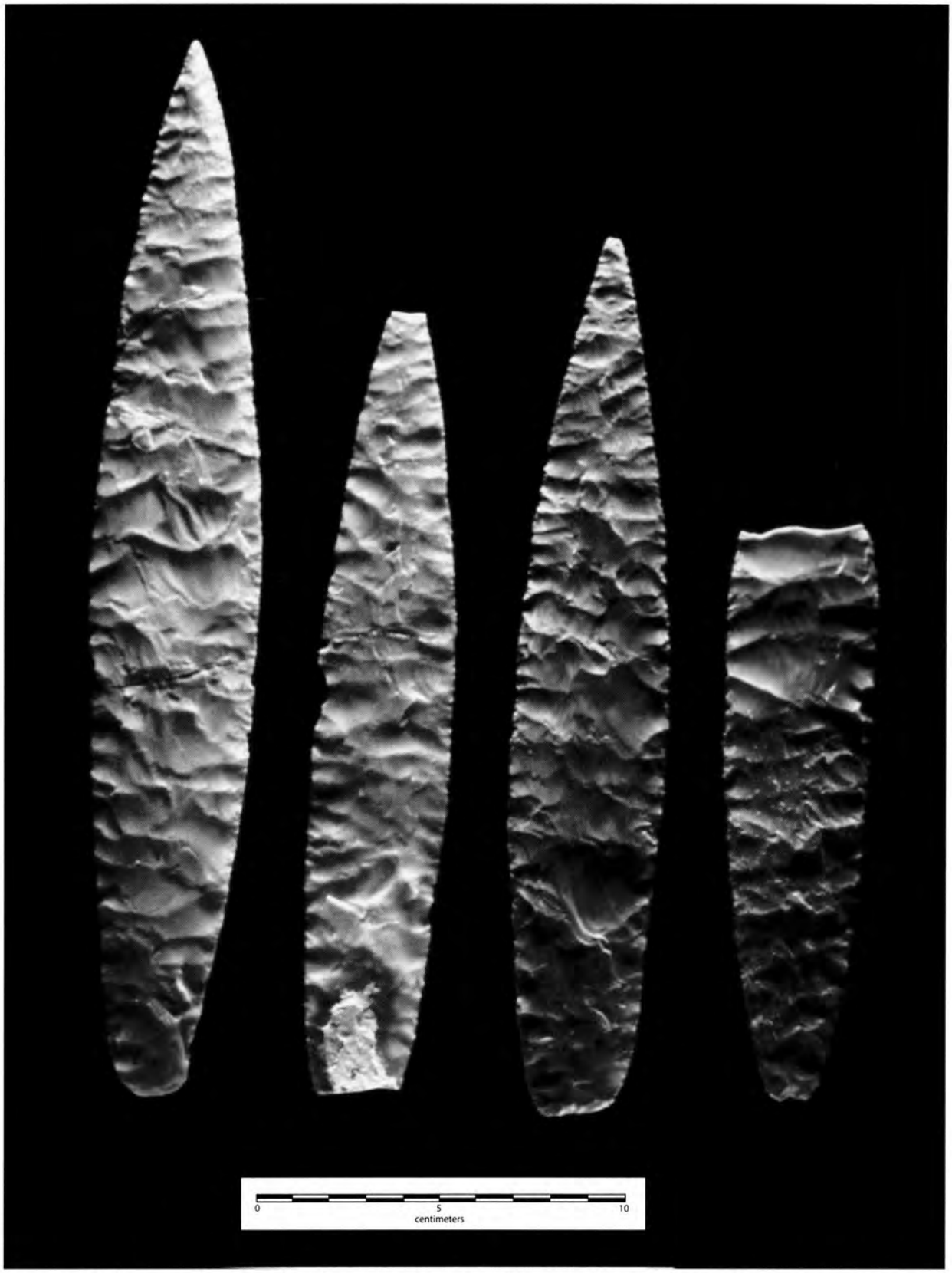

Figure 2. The Kothmann Ranch Cache and specimen from the La Jita site. Left to right, Specimen 1 (Kothmann); Specimen 3 (Kothmann); Specimen 2 (Kothmann), and specimen from La Jita (41UV21).

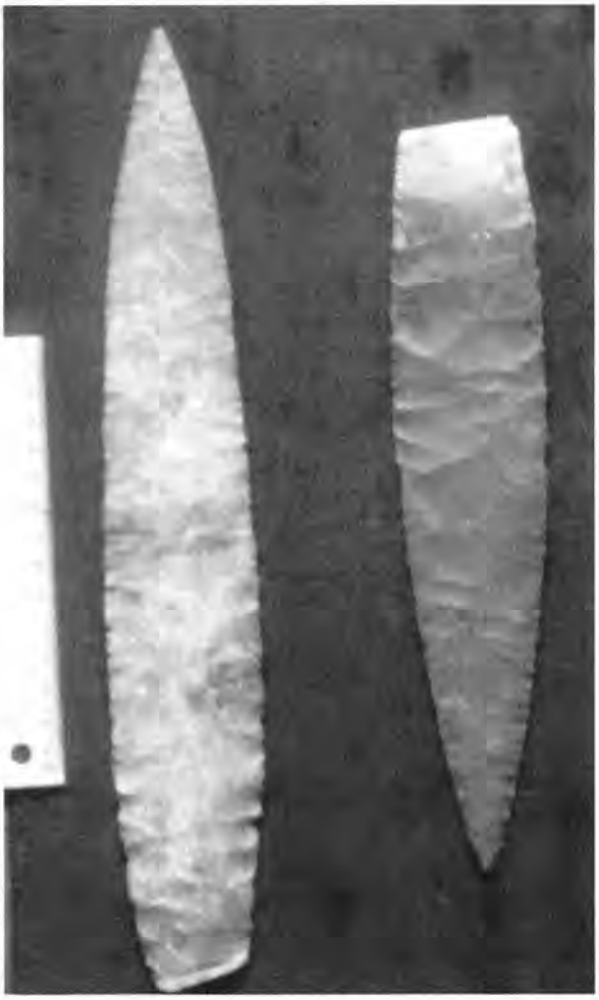

Figure 3. The Knothole Cache. Both specimens from the cache are shown. The owner of the cache had them glued to a display, and thus the different orientations.

Figure 4. View of Knothole Cache discovery pit. Owner has placed the artifacts (1973) in the positions in which they were found. The items around it are rocks, not associated artifacts.

the bifaces were found (Figure 4). The bifaces, although glued down to a display board when we examined them, were photographed and measured and otherwise recorded. The largest specimen (Figure 5, see also Figure 3), of pale brown chert, is very similar in outline to the Kothmann Cache bifaces. It is 33.5 cm long, 5.45 cm wide, and 0. 5-0.7 cm thick; basal width is 3.3 cm. There is cortex at the base (5.5-6 mm thick), as on one specimen in the Kothmann Cache. Prepared platforms can be send along the lateral edges and there is some edge-dulling that appears to be related to the reduction process. The flaking is carefully done, mostly parallel, and with deep parallel flakes near the base.

The second specimen (Figure 6, see also Figure 3), made of gray chert, is 27.5 cm long, 5.3 cm wide, and 0.65-0.7 cm in average thickness. Basal width is

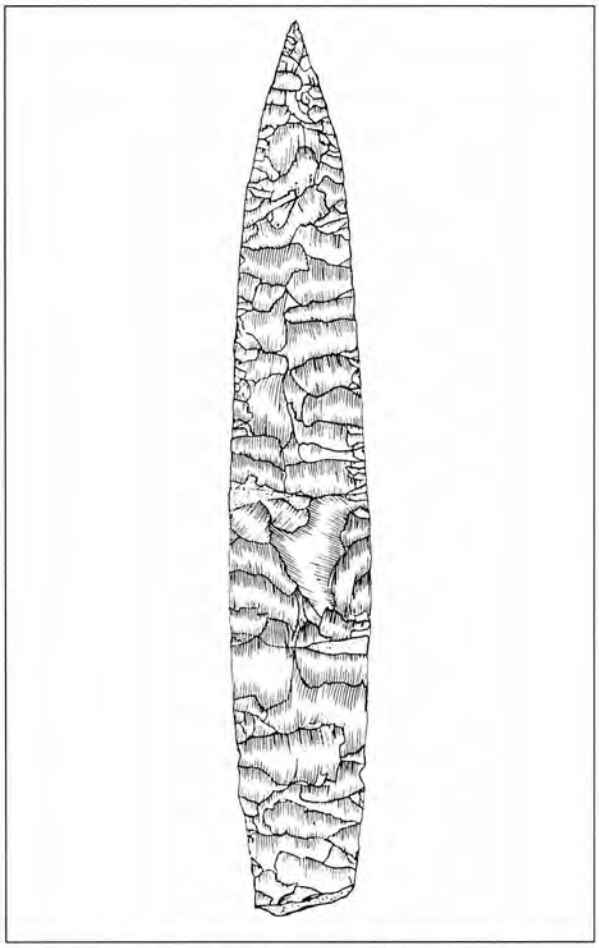

Figure 5. Drawing of Knothole Cache biface. This is the largest of the two specimens, 33.5 cm long. Illustration by David L. (Buddy) Calame, Jr.

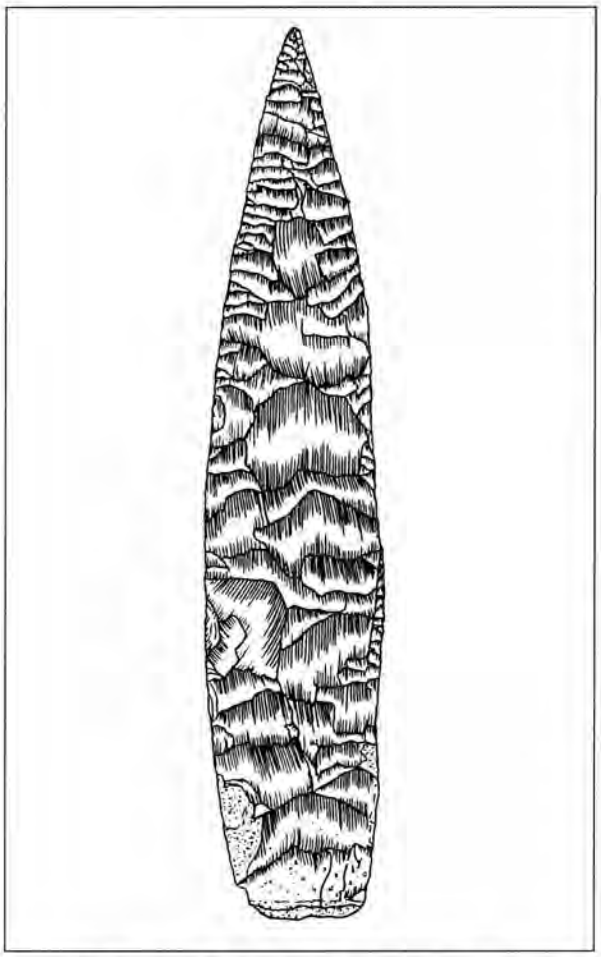

Figure 6. Drawing of Knothole Cache biface. This is the second biface from the cache. It is 27.5 cm long. Illustration by David L. (Buddy) Calame, Jr.

4.0 cm. The biface has cortex at the base, where the edge is straight or flat; this "rind" of cortex is 2 mm thick. The distal portion has short parallel to parallel oblique flakes, and broad percussion flakes on the lower half (see Figures 5-6). There is no dulling of the lateral edges. Interestingly, parts of the edges of both bifaces are lightly serrated.

Also of note is that the Knothole Cache bifaces are not made of heat-treated chert. By contrast, the Kothmann Ranch bifaces are shiny and glossy on the flake surfaces, possibly indicative of heat-treating.

Comparing the Kothmann and Knothole Caches to Other Lanceolate Artifacts

The Kothmann Ranch and Knothole caches are remarkably similar and we offer the hypothesis that these caches represent the Angostura equivalent of the Clovis caches of earlier times. Though some specimens in the caches could have been further reduced and used as spear tips, and two in the Kothmann Ranch cache had dulled proximal edges, our inclination is to view them as special deposits, perhaps ritual in character or perhaps placed with burials, the bones of which have not survived. Three of the five bifaces in the two caches have been broken. Whether this was intentional (i.e., they were "killed") or resulted from the pressure of the earth overlying them is unclear.

Although the Angostura type in Texas is a "catch-all" type for all sorts of lanceolate bifaces of Late Paleoindian times, and though they vary considerably in form and technology, there is clear evidence of presumed Angostura specimens that appear to shed light on the Frio County caches.

The caches are very similar to a broken biface that Hester (1971) excavated at the La Jita site (41UV21) in Uvalde County, in 1967. This light brown biface (see Figure 2) is 16 cm long. It is 4.3 cm wide and 9 mm thick. These measurements are similar to those of the Kothmann Ranch Cache. It also has parallel flaking and is bi-convex in cross section. The lateral edges are not dulled, and it may have been broken during reduction. The artifact came from the base of the deposits, which were dominated by Early Archaic artifacts. However, the deposits at La Jita were quite compressed and with a fair amount of mixing. Hester's field notes indicate that it was quite a surprise to find this large biface at what appeared to be the very bottom of the site. No radiocarbon dates are available.

About 50 miles to the north of Frio County, two relevant specimens are reported from the Medina River drainage of southern Bandera County (Figure 7). These were found in a heavily eroded area, from which dam fill had been removed many years ago. At the request of the landowner, the name of the ranch is not disclosed. Both of the specimens are heavily patinated, and both are broken (the tip of the specimen on the right has since been found, but we have not yet had the opportunity to photograph the "reunited" artifact). The two large bifaces were found on the surface, close together, but obviously exposed at various times. The pieces were even "flipped" by erosional processes resulting in the differential weath-

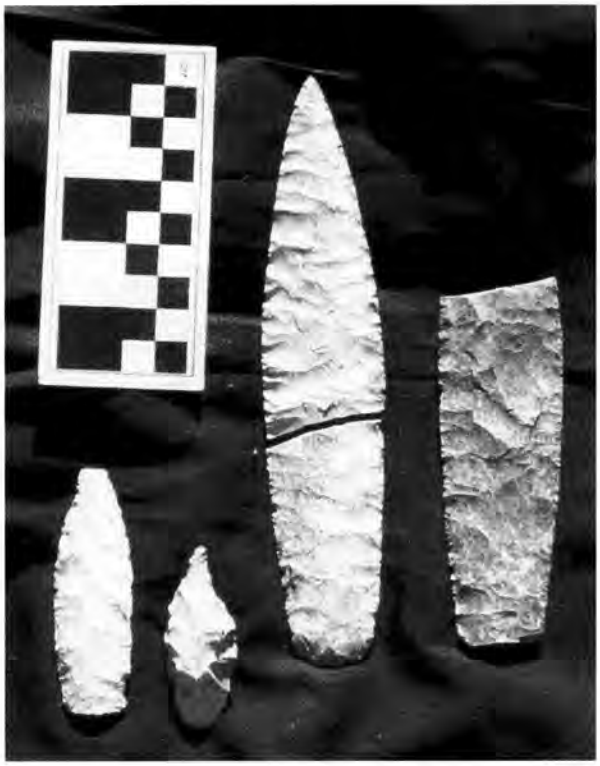

Figure 7. Angostura artifacts from Bandera County. The two specimens on the right are of comparative value for the present study. The two specimens on the left are reworked Angostura points. All were found on a deflated surface in Bandera County.

ering observed on them. The largest specimen (see Figure 7) is almost 19 cm long, about 4 cm wide, and 0.7 cm thick. It has beautiful parallel flaking, but no lateral edge dulling. The other specimen (see Figure 7),which now has its distal half, is essentially the same size, but is not as well made as the other biface. Two other artifacts collected near these bifaces are a heavily patinated Angostura mid-section and a heavily reworked point, also appearing to be Angostura. So, it may well be that these two large bifaces were not part of a cache, but were part of an Angostura component that has been completed deflated.

Other interesting comparative specimens have come from a large locality known as the Cibolo Sand Pit, on Cibolo Creek in Wilson County, around 65 miles northeast of the Frio County caches. Sand mining operations and subsequent sand-processing activities led to the discovery of thousands of artifacts of all time periods, but dominated by hundreds of Paleoindian points. Several of the dozens (hundreds?) of Angostura points from the Sand Pit are specimens that resemble the cache artifacts reported here.

For example, the biface illustrated in Figure 8 (about 24 cm long) is almost identical in form to the Frio County caches, and even has the cortex remnant on the base. Some of the obviously finished Angostura points from the Sand Pit are 17 cm or more in length. These specimens, like the excavated one from La Jita, help to provide a broader context for the Frio County caches.

Figure 8. Large biface from Cibolo Sand Pit, Wilson County. The specimen is similar to the Kothmann and Knothole caches. It is 24 cm long and has cortex at the base. Courtesy Dr. Leslie Pfeiffer.

The Veltmann Cache

Finally, we report an even more controversial cache in terms of its cultural affiliations. It comes from Kinney County in the southwestern Edwards Plateau, in the drainage of the West Fork of the Nueces River (41KY154). These were found by C. C. Veltmann in July 1962, during very heavy rains in the West Fork area. The discovery was made from horseback, while gathering livestock, when Mr. Veltmann spotted a wet and shiny piece of "flint" sticking out of the soil. He dug around this with his fingers, trying to dislodge it. He then dug at it with a stick, eventually pulling it out of the muddy soil. Then, he found that it had been placed vertically, with two bifaces of comparable size placed on either side, face-to-face so to speak, and with their pointed ends place down.

The Veltmann Cache (Figure 9) is characterized by bifaces of massive size. We want to emphasize that we obviously do not relate them in any way to the Frio County caches. All three are extremely large bifaces, but are relatively thin and two have cortex on both faces. This means they were chipped from thin slabs of Edwards chert. Seams that yield this sort of thin, slab chert are known to occur in the drainage of the West Fork of the Nueces River.

The first biface is 33.6 cm long and is triangular to roughly lanceolate in outline (Figure 10). There are some red inclusions in the fine-grained brown chert of which it is made, but also evidence that red ochre or hematite had once been smeared over most of the specimen. There is also scattered dulling along the lateral edges and it is especially notable along the basal edge. Maximum width at the base is 19.9 cm. Remarkably, its maximum thickness is only 2.0 cm and most of it is thinner (1.3-1.9 cm).

The second biface (Figure 11) is a large curved specimen, although most of it is parallel-sided. It is

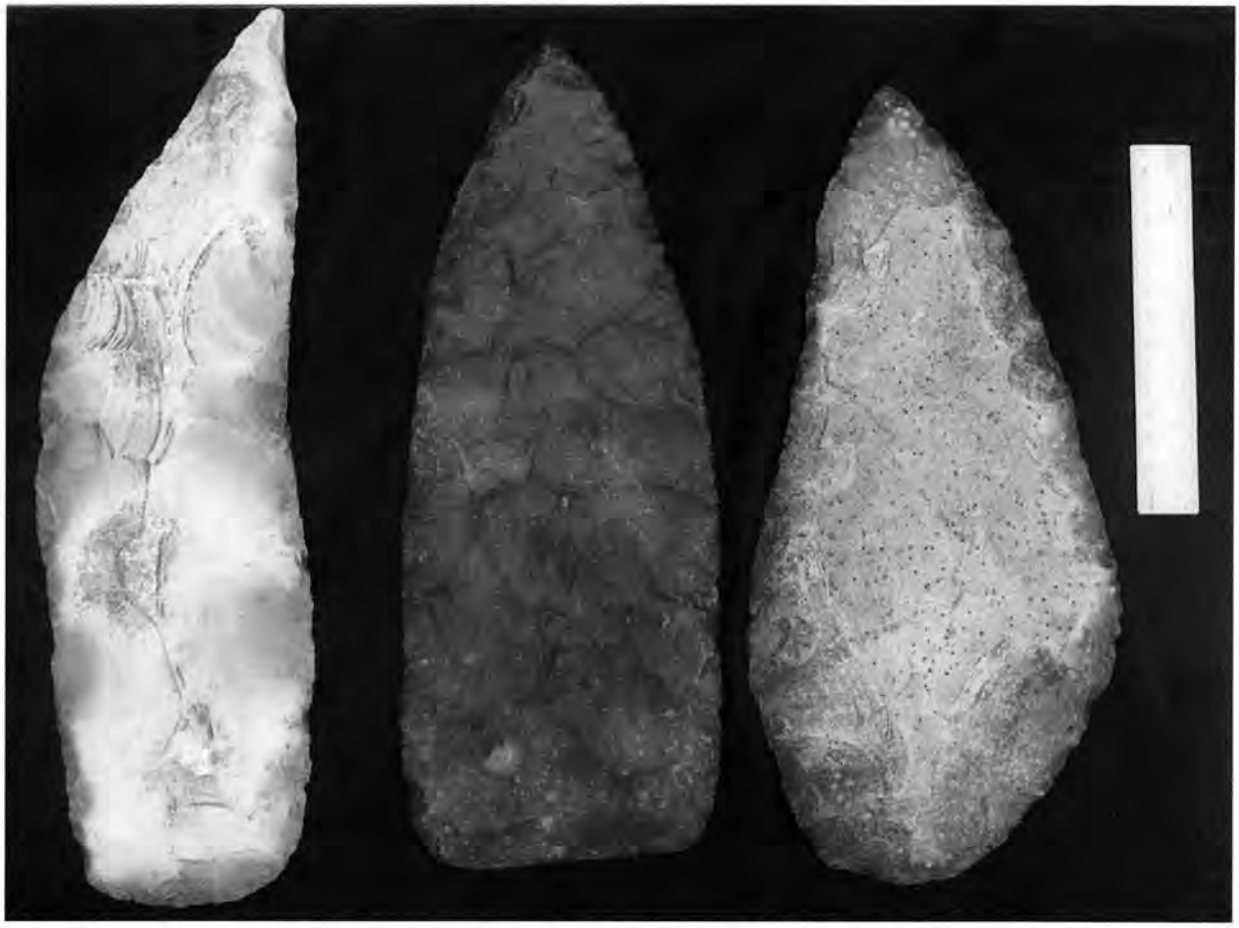

Figure 9. The Veltmann Cache. All three specimens are shown. The scale on the right is 15 cm long.

Figure 10. Specimen 1 from the Veltmann Cache. Scale is 15 cm.

Figure 11. Specimen 2 from the Veltmann Cache. Scale is 15 cm.

made of fine gray chert that is heavily patinated to white in numerous areas. The base is beveled (35 degree angle), probably the result of preparation of platforms for further thinning, and it has two burin facets, struck from the tip. Extensive red ochre residues are found on the cortex on one face. At 36.6 cm, it is a little longer than the first specimen, but is thinner (1.5 cm at the tip; elsewhere, 1.3-1.4 cm). Maximum width is 9.8 cm and the basal width is 9.4 cm. The biface has high glossy polish over all the flake scars.

The third biface (Figure 12) is pointed ovate in form and resembles a typical "quarry blank." It is made of brown opaque chert. Length is 32.1 cm, maximum width is 15.2 cm, and it is 1.9 cm at its thickest point (the rest of the biface ranges between 1.65-1.8 cm in thickness). Like specimen 2, it has areas of heavy polish, along with light, scattered spots of patina.

Both faces have extensive patches of cortex. Of great interest is the area of cortex on one face, near

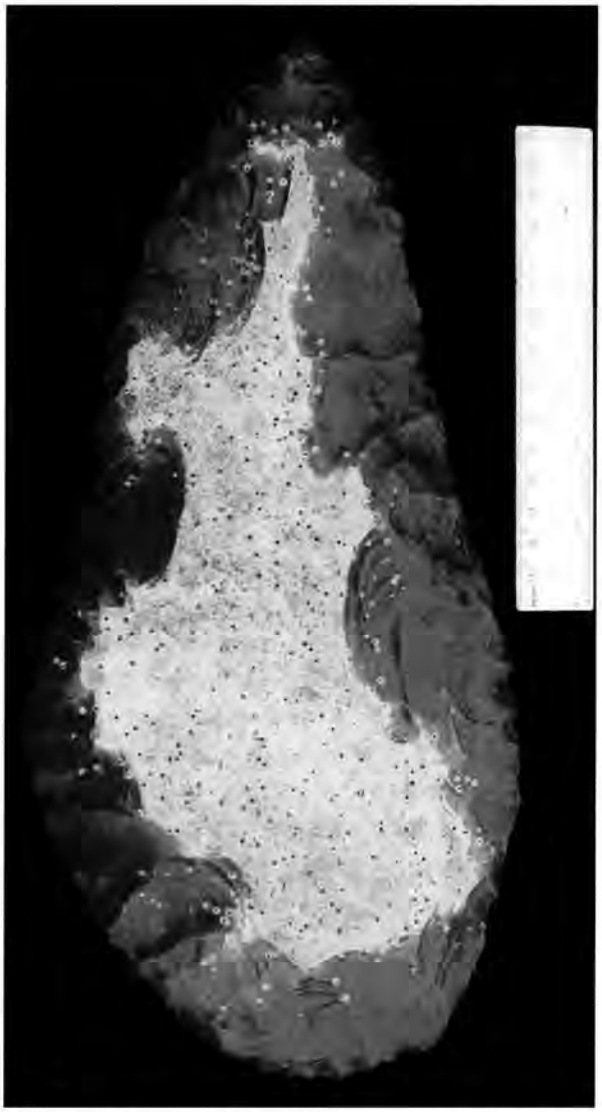

Figure 12. Specimen 3 from the Veltmann Cache. Scale is 15 cm.

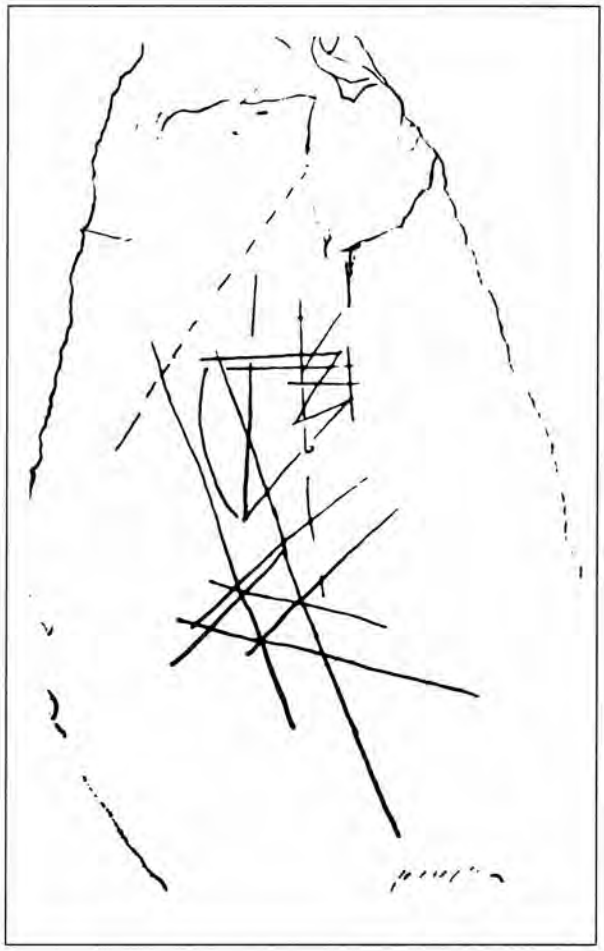

Figure 13. Sketch of engraved lines from Specimen 3 in the Veltmann Cache.The lines are on the distal end of the biface illustrated in Figure 12. Lines are of various length, with the longest about 10 cm.

the distal end, that has numerous faint, but distinct engraved lines (Figure 13). Anyone familiar with the work at the Gault Clovis site in Bell County is aware of the cortex-engraved pebbles of Clovis age found there (e.g., Collins et al. 1992). While this is somewhat similar, Michael B. Collins does not think that the Veltmann Cache bifaces have any distinctive traits of Clovis technology.

It is presently impossible to ascertain the age of the Veltmann Cache. We suggest that it is "early," perhaps early in the Archaic—if for no other reason than it is so very different from other Archaic biface caches on the Edwards Plateau. Other caches have some specimens that are similar in size, but not in technological characteristics. The polish on two bifaces may derive from the specimens having been carried in leather bags or wrapped in hide. It is not from wear. The context of the Veltmann Cache indicates that it was a ritual cache, with red ochre, engraved lines, and the distinctive polish. Though we were hoping to carry out test excavations in and around the cache locale, that proved impossible, as the find-spot is now covered by a paved farm-to-market road.

CLOSING COMMENTS

Biface caches remain a mystery, and as documented in the Lintz and Saner (2002) study of

the Hoerster cache, there are several potential interpretations for the creation and placement of caches. Fortunately, many caches have been documented in recent years, and if we can get more information on age and context, it is likely that important patterns of "cache behavior" will emerge.

Based on the present data, we suggest that the Kothmann Ranch and Knothole caches are related to Angostura, and would date ca. 6800 B.C. (Turner and Hester 1993). This attribution is supported by large, similarly flaked bifaces of Angostura affiliation which we have documented here. Interestingly, a large cache of lanceolate bifaces has recently been reported from Wisconsin (Carr and Boszhardt 2003). Known as the Kriesel cache, some specimens are reminiscent of the Kothmann Ranch and Knothole caches. However, they are not as well-flaked and the largest specimens are just under 20 cm in length. The investigators of the cache link it to the Agate Basin type of "Late Paleoindian" times.

We can only speculate that the Veltmann Cache is "early" in the cultural sequence of the region. It is distinctive from the numerous Middle and Late Archaic biface caches that have been previously reported (cf. Miller 1993). While they are not Clovis, based on their flaking technology, the presence of the engraved cortex on one of them may be indicative of considerable antiquity. For example, Collins (1998:151) reports a flake from the Early Paleoindian component at Wilson-Leonard with engraved cortex. It is a trait that we have not seen on other biface caches that we have examined. Regardless of its age, the Veltmann cache appears to have been of ritual nature, given the use of red ochre and the close vertical placement of the large bifaces.

ACKNOWLEDGMENTS

We are grateful to the family of the late Dr. Pat Riley of McAllen, Texas, for their generous donation of his collection, which included the cache reported here, to the Texas Archeological Research Laboratory. Mr. Calame wishes to thank the landowner in Frio County who provided access to the Knothole Cache. Both authors express their deepest thanks to C. C. Veltmann and his wife for their hospitality and cordial cooperation in the study of that cache. Cindy Smyers of Midland brought the Veltmann cache to the authors' attention. Dr. Leslie Pfeiffer of San Antonio is thanked for giving permission to reproduce the illustration of the large Angostura specimen from the Wilson County "Sand Pit."

REFERENCES CITED

Carr, D. H. and R. F. Boszhardt
2003 The Kriesel Cache: A Late Paleoindian Biface Cache from Western Wisconsin. *Plains Anthropologist* 48 (187):225-235.

Collins, M. B. (assembler and editor)
1998 *Wilson-Leonard. An 11,000-year Archeological Record of Hunter-Gatherers in Central Texas. Vol. 1: Introduction, Background and Syntheses*. 5 Vols. Studies in Archeology 31, Texas Archeological Research Laboratory, The University of Texas at Austin, and Archeology Studies Program Report No. 10, Texas Department of Transportation, Environmental Affairs Division, Austin.

Collins, M. B., T. R. Hester, and P. J. Headrick
1992 Engraved Cobbles from the Gault Site, Central Texas. *Current Research in the Pleistocene* 9:26-28 [see also *La Tierra* 19(4):3-5]

Frison, G. F. and B. Bradley
1999 *The Fenn Cache. Clovis Weapons and Tools*. One Horse Publishing Co., Santa Fe.

Gramley, R. M.
1993 *The Richey Clovis Cache*. Persimmon Press, Buffalo.

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

Kornfeld, M., K. Akoshima and G. C. Frison
1990 Stone Tool Caching on the North American Plains: Implications of the McKean Site Tool Kit. *Journal of Field Archaeology* 17:301-309.

Lintz, C. and B. Saner, Jr.
2002 The Hoerster Cache from 41MS67, Mason County, Texas. *La Tierra* 29(1):12-47.

Miller, K.
1993 A Study of Prehistoric Biface Caches from Texas. Master's thesis, Department of Anthropology, The University of Texas at Austin.

Turner, E. S. and T. R. Hester
1993 *Field Guide to Stone Artifacts of Texas Indians*. 2nd edition. Gulf Publishing, Houston.

Woods, J. C. and G. L. Titmus
1995 A Review of the Simon Clovis Collection. *Idaho Archaeologist* 8:3-8.