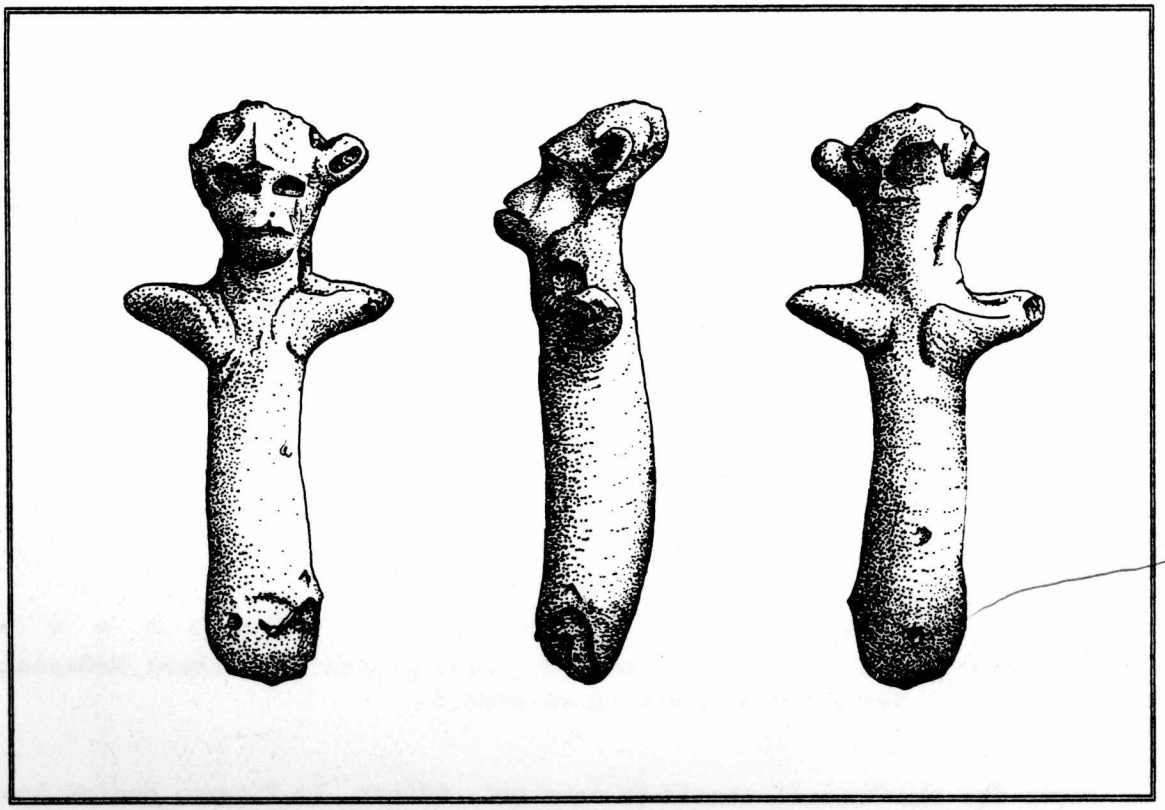
LA TIERRA



JOURNAL OF THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

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LA TIERRA

QUARTERLY JOURNAL OF THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

Volume 17, Number 4
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Evelyn Lewis
Editor

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About the Cover: An unusual clay artifact is depicted by Richard McReynolds. See article starting on page 8.

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NOTES ON SOUTH TEXAS ARCHAEOLOGY: 1990-4

Radiocarbon Dates from Archaeological Excavations in Medina County

Thomas R. Hester

In 1987, the summer archaeological field school of The University of Texas at San Antonio was held at the Batot-Hooker site (41ME34) in Medina County. The site is located west of Hondo (see Hester 1987 for a summary of research at the site). Excavations concentrated in two areas. One was focussed on the exposure of a Late Prehistoric (Toyah Horizon) occupation in a multi-unit block. The other excavation was a 1x2-meter test pit placed in a high area overlooking the nearby creek; this was designated as Unit H. It was excavated in 10-cm levels to a depth of 145 cm. Lithic diagnostics were scattered vertically through the levels, providing a sequence of Late Prehistoric, Late Archaic (Castroville), Middle Archaic (Tortugas?, Clear Fork tool) and Early Archaic (Guadalupe tool; see Turner and Hester 1985 for typological descriptions). Additionally, several sizable charcoal samples were recovered.

In summer, 1990, the Radiocarbon Laboratory of The University of Texas at Austin provided assays for two wood charcoal samples from Unit H. These analyses were made possible by a grant from the Donors Fund of the Texas Archeological Society. The results are published here, with brief interpretative remarks.

Sample 41ME34, #1 (TX-6932) was obtained from Level 10 (90-100 cm) of the north part of Unit H (Zone III). It was a large *in situ* deposit of wood charcoal fragments. Some pieces were saved for wood species identification, although this has not yet been completed. From the same level was a Guadalupe tool, scattered hearthstones, a concentration of land snails, and a small tabular chert cobble from which a number of flakes had been removed--with the flakes lying in close proximity. This provenience pretty clearly represented a fairly well preserved midden of Early Archaic vintage. The radiocarbon assay is 5730±80 B.P. (uncorrected; or ca. 3780 B.C. uncorrected). Correcting the date using the latest radiocarbon age calibration program (Stuiver and Reimer 1987) yields an assay best expressed in the range of 6669-6739 B.P. or 4493-4720 B.C. (This and all subsequent ranges are at one sigma).

Sample 41ME34, #2 (TX-6933) was collected *in situ* at a depth of 80 cm (top of Level 9) in the west wall of Unit H (Zone IV). These wood charcoal fragments (again, some retained for possible wood species identification) came from a possible hearth feature exposed in the wall. Materials from Level 9 include scattered hearthstones, snails, chert debitage, and a thin triangular biface. The latter most closely fits the Tortugas type; it is clearly not from the Early Triangular category. The radiocarbon assay was 4670±60 B.P. (uncorrected; 2720 B.C. uncorrected). Again, using Stuiver and Reimer (1987), the assay was calibrated as 5311-5547 B.P. or 3362-3598 B.C.

The following comparative comments can be offered at present. The assay associated with the Guadalupe tool compares well with a radiocarbon date obtained for a Guadalupe artifact from the Smith site (41UV132) in Uvalde County: 5520±90 B.P. (uncorrected) or 6284-6413 B.P. and 4335-4464 B.C. (calibrated; Stuiver and Reimer 1987).

In Bexar County, two radiocarbon assays have been obtained in contexts suggesting their association with Guadalupe tools. One sample comes from Granberg II (41BX271; TX-3606). It is 4770±110 B.P. (uncorrected), corrected to 5329-5639 B.P. and 3380-3690 B.C., somewhat later than the assays from 41ME34 and 41UV132. Another sample (TX-3912) is derived from the Panther Springs Creek site (41BX228; Black and McGraw 1985). Its radiocarbon age is 4720±170 B.P. (uncorrected), corrected to 5289-5649 B.P. and 3340-3700 B.C. This correlates well

with the sample from 41BX271, yet, it too is later than the Medina and Uvalde County assays.

A number of things could explain the variations in the dates. First of all, this may simply reflect the age range for Guadalupe tools, something on the order of 6739-5289 B.P. or 4720-3340 B.C.--around 1,400 years. This is certainly within the hypothesized limits of the Early Archaic, sometimes put at 5500-3500 B.C. There are other manipulations that can be done with radiocarbon assays that would tighten up, or expand, the range. Alternatively, the two samples from Medina and Uvalde Counties were from discrete contexts (e.g., at 41UV132, the sample came from within a hearth). Conversely, the Bexar County samples are from more complex contexts that are open to a variety of interpretations. Space does not permit (perhaps fortunately) a more extensive discussion of the vagaries of radiocarbon assay interpretation. Suffice it to say that these new dates from Medina County, combined with those from Uvalde and Bexar Counties, give regional archaeologists a firmer chronological perspective of the antiquity of the Guadelupe tool form. As to the radiocarbon assay associated with the triangular point at 41ME34, we will have to await further research in order to evaluate its significance. Radiocarbon assays for triangular (Tortugas) points in southern Texas are few and scattered. Hall, Hester and Black (1986:398-399) consider these points as diagnostics of the Middle Archaic, which they date from 2500-400 B.C., later than the assay from 41ME34. Larger, thin triangular biface fragments were found at 41LK31/32 (ibid.:397) at Choke Canyon, associated with radiocarbon dates of 3350-3380 B.C., but these artifacts do not resemble the 41ME34 biface. Triangular bifaces in southern Texas remain a source of confusion, but perhaps eventually the 41ME34 sample will help clarify the situation.

ACKNOWLEDGMENTS

The radiocarbon determinations reported here were funded by a grant from the Donors Fund of the Texas Archeological Society. I want to especially thank Kerza Prewitt, former chair of the Fund for her assistance. Thanks are also extended to the landowners of 41ME34 and the students who participated in, and endured the rains of, the 1987 UTSA summer field school.

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AN INCISED STONE FROM ATASCOSA COUNTY, SOUTH CENTRAL TEXAS

Richard L. McReynolds and Charles K. Chandler

ABSTRACT

A sandstone artifact was recovered from a site along San Miguel Creek in Atascosa County, Texas. The stone itself appears to be a naturally formed object, but it is incised with a series of fine lines to form deliberate patterns which are comparable to some incised bone artifacts.

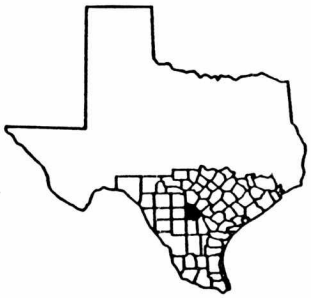
INTRODUCTION

Incised or carved stone objects are not at all common in Texas and are extremely rare in most of South Texas (Mitchell 1973; Hester 1980). On the other hand, painted pebbles are fairly common, particularly in the Lower Pecos and Big Bend areas of Texas; these artifacts have been reported by a number of writers. Martin and Woolford (1932) were among the first to draw attention to the painted pebbles of the Big Bend region. Davenport and Chelf (n.d.) also reported painted pebbles from the Lower Pecos. Neither of these reports contained any information about incised pebbles. Jackson (1938) documented a number of incised or carved stones in Edwards, Llano, Williamson, Johnson, Cass, Bell, Coleman, Hopkins, Kinney, and San Saba Counties of Central and southwestern Texas, but did not report any such stones from any area of South Texas.

THE SITE

An incised stone was recovered from the surface of a prehistoric Indian site on a low hill slope about 300 yards from the south bank of San Miguel Creek in southwestern Atascosa County, Texas. The San Miguel originates in northeastern Frio County and flows through southern Atascosa County before joining the Frio River in northeastern McMullen County, some miles east of Tilden, Texas (see Figure 1). A number of sites have been reported along the San Miguel watershed since the area was first surveyed by Dr. T. N. Campbell's 1954 Anthropology 340 class (Hester 1968). These sites contain predominately Archaic assemblages but several also have Late Paleo-Indian and Late Prehistoric components (ibid; Mitchell 1974; McReynolds, McReynolds and McReynolds 1979, 1980; McReynolds 1981). At least one site, 41AT18, also contained historic Indian ceramics, probably from the Mission Period (Mitchell 1974). Another San Miguel Creek site, located about one mile downstream from 41AT18, was where a fragment of a biconically drilled, ground stone gorget was recovered, which was lightly engraved with crosshatched lines (Mitchell 1973).

The artifact reported here was found in April, 1989 on the property of Bill and Janice Hindes. Most of the artifacts we have previously reported from this site are of Late Paleo-Indian age. The possible exception is an end-notched Waco sinker which can not be accurately dated but whose origins are probably Paleo-Indian period. Both sinker and incised stone of this report are made of the same material.



THE ARTIFACT

This artifact is a small cylindrically shaped, naturally formed object of reddish brown ferruginous sandstone, with fine line incising over all surfaces (see Figure 2). The incising is a series of straight lines at an angle running

from end to end and crossing in an X pattern near the center and about one-third of the way from each end. A triangle is thus formed at each end with its narrow base at the end. Additional straight lines are repeated three times around the cylinder. The repeated designs are of uniform size and very neatly executed.

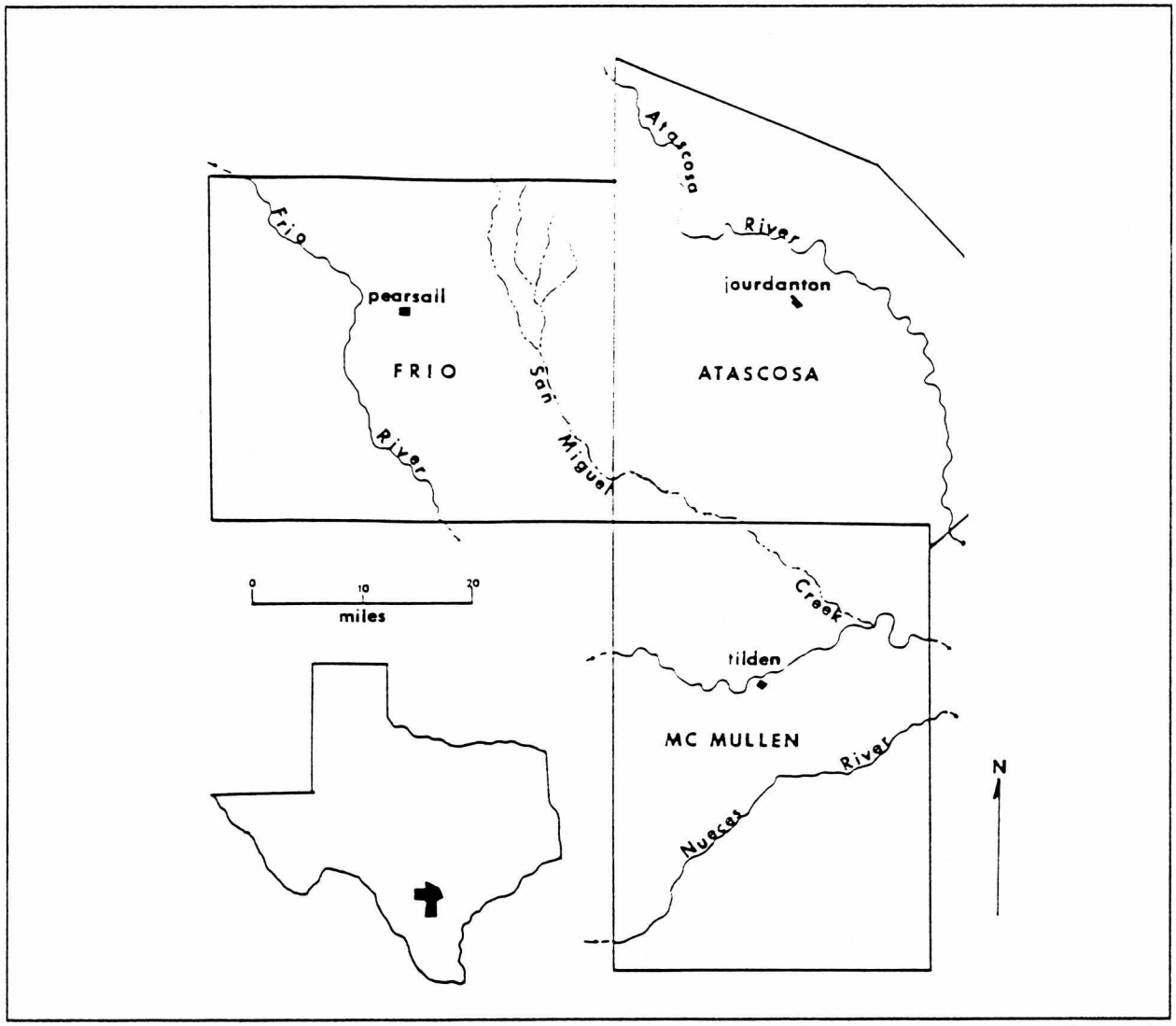


Figure 1. The San Miguel Creek Area of Atascosa, Frio, McMullen Counties, in Central South Texas. (Map adapted from Hester 1968, courtesy of the *Bulletin of the Texas Archeological Society*).

The artifact is 64 mm long, with a diameter of 16 mm, and weighs 21.6 grams. It has a slight longitudinal bow and there is a shallow concavity about 10 mm deep in one end. It cannot be determined if this concavity was man-made or was the result of erosion. This end was broken; some of the broken pieces were recovered and the end was reconstructed. The center of the artifact is solid. This area is a little redder and of finer grain material than the exterior.

DISCUSSION

This incised pebble from southwestern Atascosa county is different from any other carved stone artifact illustrated in the literature in that it is a cylindrical shape, whereas other incised and carved stones (and painted pebbles) are flattish and rectangular in shape. The diamonds and stacked triangles formed

by the crossed Xs on this Atascosa County artifact are not seen on other painted or carved pebbles reported in the Texas archaeological literature. The designs found on carved stones rarely find parallels on the painted pebbles documented in the Lower Pecos region. They do, however, show some resemblance to some of the geometric pictographs and petroglyphs found further west.

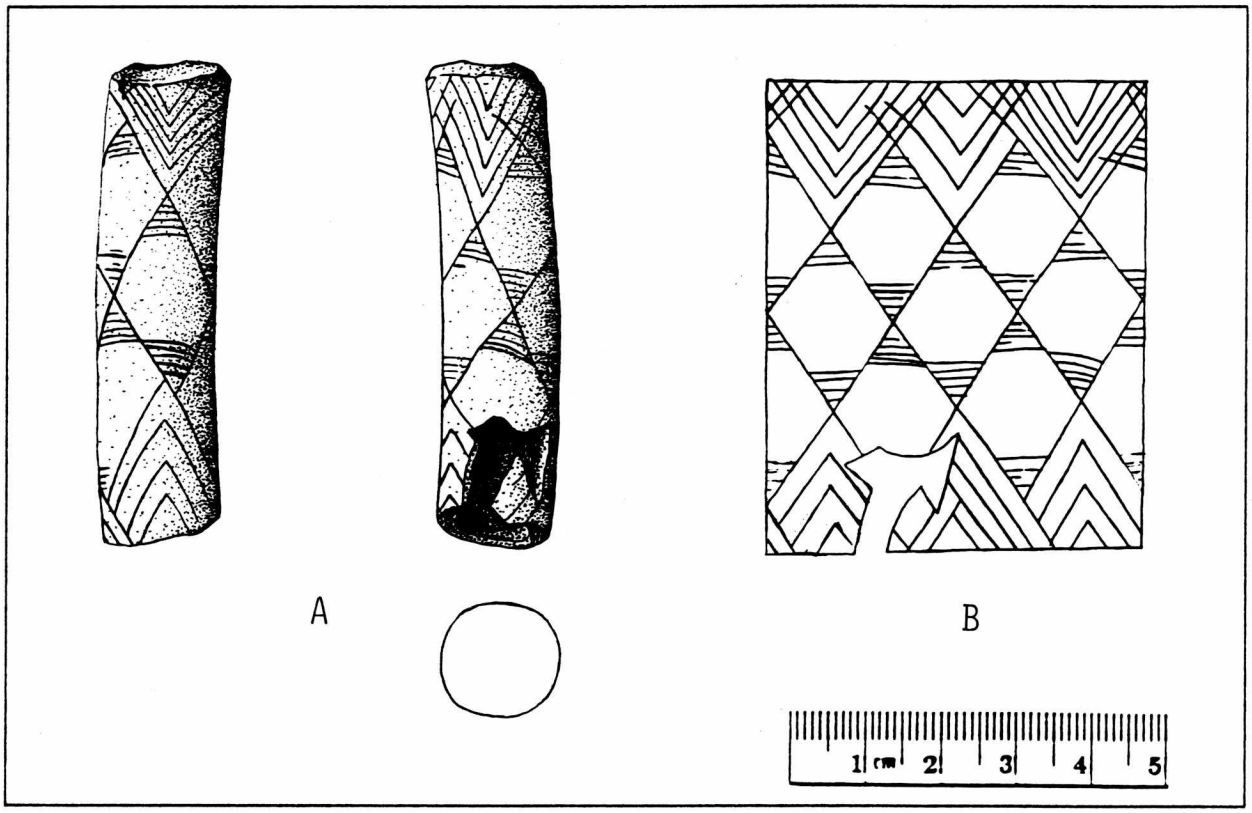


Figure 2. Incised Stone Artifact from Southwestern Atascosa County, Texas. A, two views and diameter of artifact; B, overall design around artifact. (Illustration by Richard McReynolds.)

Painted pebbles are most often found in rockshelters while incised pebbles are usually found in open sites. Jackson (1938) noted some similarities between the West Texas painted pebbles and some of the painted designs on the canyon walls in that area. He took particular note, however, of the marked absence of realistic human and animal paintings on the pebbles. He suggested that, in many cases at least, they were prompted by different motivations.

Mock (1987), in her recent studies of several forms of portable rock art, reported a great variety of suggested uses for painted and incised stone objects, which are found in most areas of the world. Suggested uses include as effigy figures in a ceremony, for curing rituals, and for shamanistic rituals involving control over the environment, or to insure hunting success. In some cultures rocks of a certain shape, or with incised designs, were considered persons and were thought to possess powers.

The great disparity between the large number of painted pebbles found in the Texas Trans-Pecos and the much smaller number of incised or carved stones found mostly east of the Pecos may strongly indicate group activities for the more plentiful painted pebbles. The isolated nature of most incised stones recovered in other areas of Texas may suggest that they are more likely of importance to individuals, or were made for something of a more personal nature.

Hall (1989) has also recently reported a number of long bone implements from Texas sites, most of which are decorated with crosshatched bands in various designs. These designs are somewhat similar to the straight line incising on the Atascosa County artifact reported here. Hall proposed several functional interpretations for these bone implements; most of these uses are of a very personal nature. The variations in the geometric design patterns incised on the surfaces of these bone implements are suggested as indications of individual ownership or identification of particular bands or lineages.

Pottery style and decoration are generally considered to be diagnostic of particular prehistoric groups (phases, complexes, etc.) or known historic tribes (Suhm and Jelks 1962), but there is considerable diversity in such attributes even within a given site which reflects individual potters or perhaps lineage groups. Several types of East Texas pottery and some coastal pottery is decorated with straight lines arranged in triangles (Corbin 1974:50). Triangles filled with straight lines (hachures) and crossed diagonals between straight lines (banded crosshatching) are not uncommon (ibid.). While not the exact pattern found on the Atascosa County incised stone reported here, such pottery decoration does appear to contain many of the same design elements.

CONCLUSIONS

The incised sandstone artifact described here appears to be a naturally formed object without substantial human alteration of its overall shape or dimensions. Its finely incised design is, however, obviously the work of humans. While prehistoric artifact functions have most often been inferred from their shapes (Hall 1989), the shape of this stone gives no clue as to its function. Certainly it does not appear to be a utilitarian tool.

The finely incised straight line designs that form Xs, triangles, and diamonds may well indicate ownership or ties to particular bands or lineages, as has been suggested for long bone implements (Hall 1989), as well as for pottery designs. Its unique design strongly argues for ownership by an individual, much in the fashion of a signature.

ACKNOWLEDGMENT

We wish to thank Jimmy Mitchell for his revue and comments on this article.

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A FIRED CLAY FIGURINE FROM BEXAR COUNTY, SOUTH CENTRAL TEXAS

C. K. Chandler

ABSTRACT

Descriptive data is provided for a fired clay figurine from southeastern Bexar County, Texas. It is unlike any previously reported figurine in Texas and its cultural attribution is uncertain.

THE ARTIFACT

This artifact is a fired clay figurine (Figure 1) found in 1961 by B. J. Johnson on the surface of a prehistoric Indian site near Calaveras Creek in southeastern Bexar County (see inset) . It is well fired, has a smooth finish but

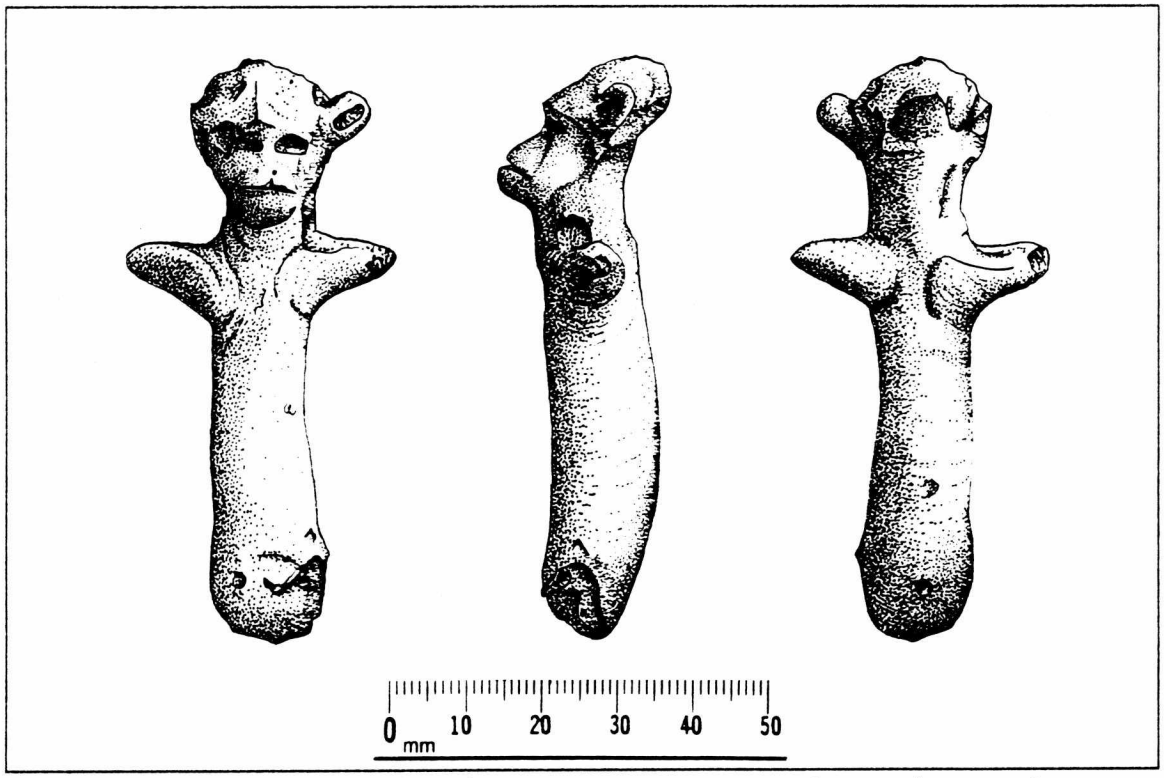
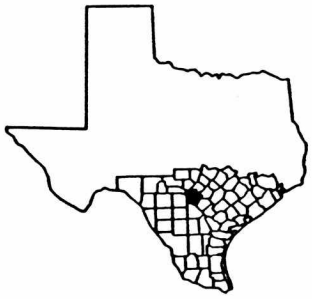


Figure 1. Fired Clay Figurine found by B. J. Johnson in Southeastern Bexar County near Calaveras Creek. Drawing by Richard McReynolds.

is not burnished. Color varies from light gray to a very dark brown. There is no visible temper. It is not shaped in a mold but is made by hand, with the plastic clay squeezed and shaped between the fingers. It is very dense and heavy for its size. It has a head showing the features of ears, eyes, nose and mouth, and with arms that protrude straight out from the body. The head is sloped backward with the ears placed rather high. The figurine would best be described as having the appearance of a monkey, 76 mm long, 35 mm wide across the arm spread, and 14 mm thick through the thickest part of the body. It weighs 23 grams.



DISCUSSION

This artifact has been known for several years but has gone unpublished in an effort to define its origin and/or cultural affiliation. The object was shown to a number of professional and avocational archaeologists, and illustrations were mailed to several others in the search for information. These efforts have not been very productive. Some have commented that it might be Huastecan, but, unfortunately, this area is so poorly published that not much is really known about it, except the fact that it is fairly rich in fired figurines.

It has been suggested that the tilt of the head appears to be made in the image of the "smiling god." The several comments referring to its "Mexican" or "Meso-American" appearance, or even South American, reinforces the consensus that it is an oddity and its origin is really unknown.

A noted Maya specialist states that while monkey faces do occur in Mayan context, this one is certainly not in the Mayan style. The tropical lowlands of Central America have used monkey figurines extensively in their art, and monkey heads are often displayed as architectural decorations on buildings. There are several different cultural traditions and art styles that change through time, and my search for information has not led me to anyone familiar with the style of this figurine or who can identify its time period.

Fired clay figurines are comparatively scarce in Texas, and while their cultural affiliation is often impossible to establish with certainty, they all deserve publication to reinforce the data base for the study of the cultural heritage. If any reader has information identifying this figurine style and cultural origin, I would appreciate hearing from them.

§ § § § § § § § § § § § § § § § § § § §

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ARCHEOLOGICAL ASSESSMENT OF 41HY197:THE BEECROFT SITE COMPLEX, HAYS COUNTY, TEXAS

Leland C. Bement

ABSTRACT

Prompted by uncontrollable vandalism, a testing program designed to assess site potential was implemented at 41HY197 -- the Beecroft Site Complex, Hays County, Texas. A week-long field session was conducted by staff and volunteers from the Texas Archeological Research Laboratory, The University of Texas at Austin and the Texas Historical Commission in the summer of 1987. Results of this work included the determination of prehistoric site occupation during intermittent periods from late Paleo-Indian times through the Late Prehistoric Period - a span of over 8,000 years. The pattern of site use, including the accumulation of a burned rock midden with attendant hearths and the occupation of low shelters in the cliff face above the midden, resembles that of other sites in the Central Texas archaeological region. Stratigraphically intact deposits were identified in two of the five shelters as well as in the terrace deposits adjacent to the burned rock midden. The midden was shown to have buried portions not yet affected by vandalism. Artifactual materials consisted primarily of lithic tools and debitage. Limited amounts of bone, freshwater mussel shell and terrestrial snail shell were also collected. In the final assessment, the potential of 41HY197 to contribute significant or unique information about the lifeways of prehistoric groups in this portion of the Edwards Plateau has been severely limited by vandalism. The site deposits are thus fruitful only for specific research inquiries pertaining to activity areas adjacent to the midden area of the terrace.

INTRODUCTION

From July 12, 1987 through July 18, 1987 a volunteer crew from the Texas Archeological Research Laboratory (TARL), The University of Texas at Austin, conducted test excavations at a site complex northwest of Wimberley in Hays County, Texas. The site, 41HY197, consists of a complex of five rockshelters, a large burned rock midden and terrace flat on the west bank of a spring-fed tributary to the Blanco River. A total of five 1 x 1 meter test pits were excavated--one in each of two rockshelters, two at the edge of the burned rock midden, and one in the terrace near the creek.

Testing of this site was prompted by the landowner, Mr. Bert Beecroft, who was alarmed at the rate of vandalism of the site by trespassers. After seeking advice on the effectiveness of National Register or State Archeological Landmark protection, Mr. Beecroft opted for a mitigation of the destruction through excavation by professional archaeologists. Upon receiving a gift to help fund such an excavation, TARL responded with a seven-day testing program. The testing program was designed to fulfill three specific goals. Central to the effort were: 1) the evaluation and assessment of the condition of the cultural deposits; 2) the presence of significant data on the lifeways of prehistoric inhabitants in the area; and 3) the feasibility of large scale excavation of the site.

SITE SETTING

The site complex, 41HY197, is located on a small, spring-fed tributary to Cypress Creek, a major tributary of the Blanco River (Figure 1). This unnamed stream is fed by

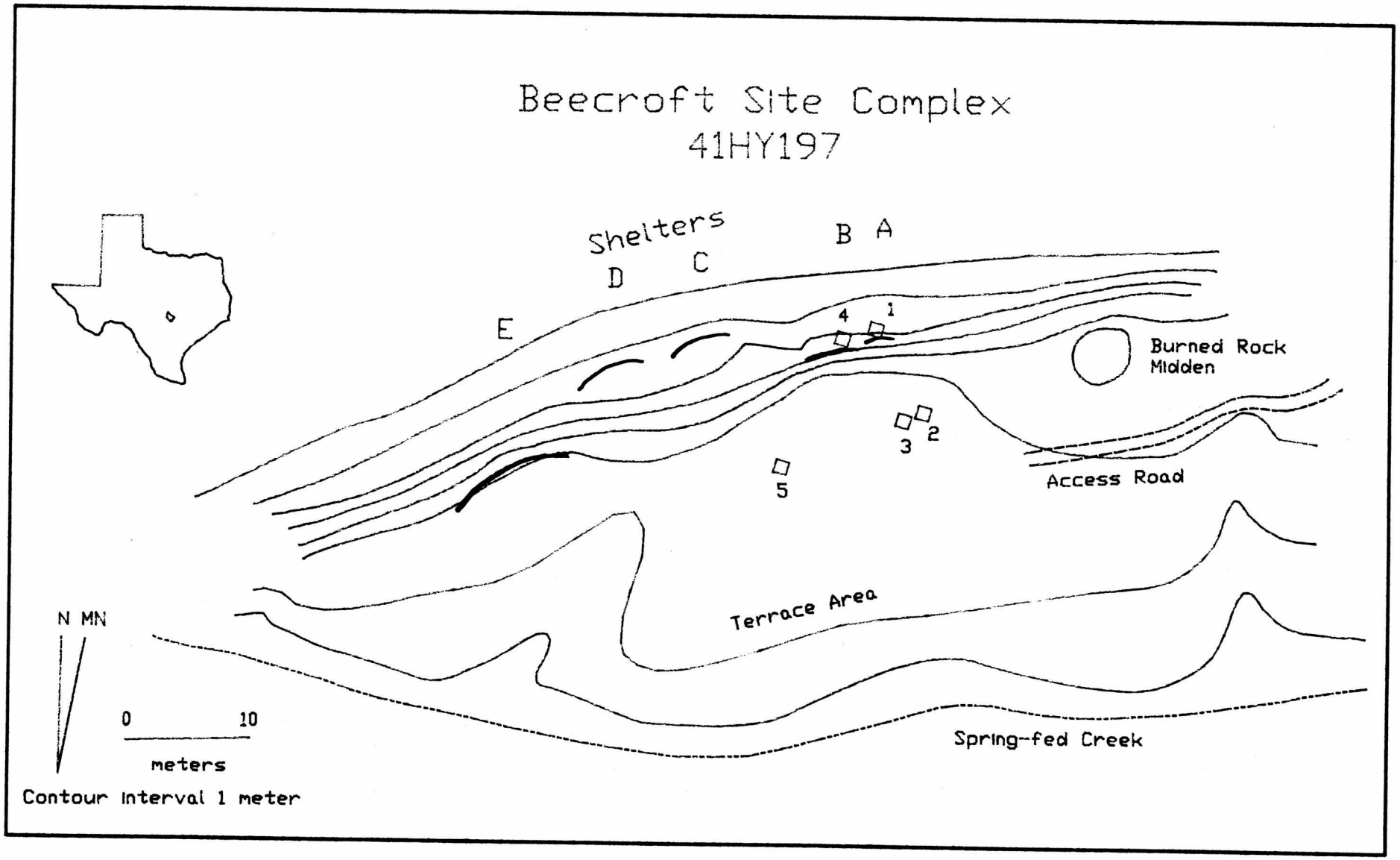


Figure 1. Plan and location map of the Beecroft Site Complex, 41HY197.

springs emerging from the Glen Rose limestone and the runoff from the stony clay-covered limestone hills (Barnes 1981). The Glen Rose Formation contains no chert - the main stone used for tools in this area. The overlying Edwards Formation, however, is often rich in cherts and such outcrops are located within 1 km of the site. In addition, eroded chert cobbles from Edwards limestone outcrops can be found on the Beecroft property.

Vegetation supported by the limestone hills today consists primarily of juniper/cedar and oaks interspersed with grassy clearings. Trees along the drainages include hardwood nut producers and live oaks. The combination of dependable water and plentiful foodstuffs attracts numerous species of game animals sought by prehistoric and modern hunters.

ARCHAEOLOGICAL BACKGROUND

Hays County is included in the Central Texas archaeological region (Brown et al. 1982; Prewitt 1981). Geographically, this region includes the Edwards Plateau, particularly the Balcones Fault zone, the Blackland Prairie belt east of the Plateau, and portions of the Cross Timbers vegetation area to the north (Gould 1975:2; Brown et al. 1982).

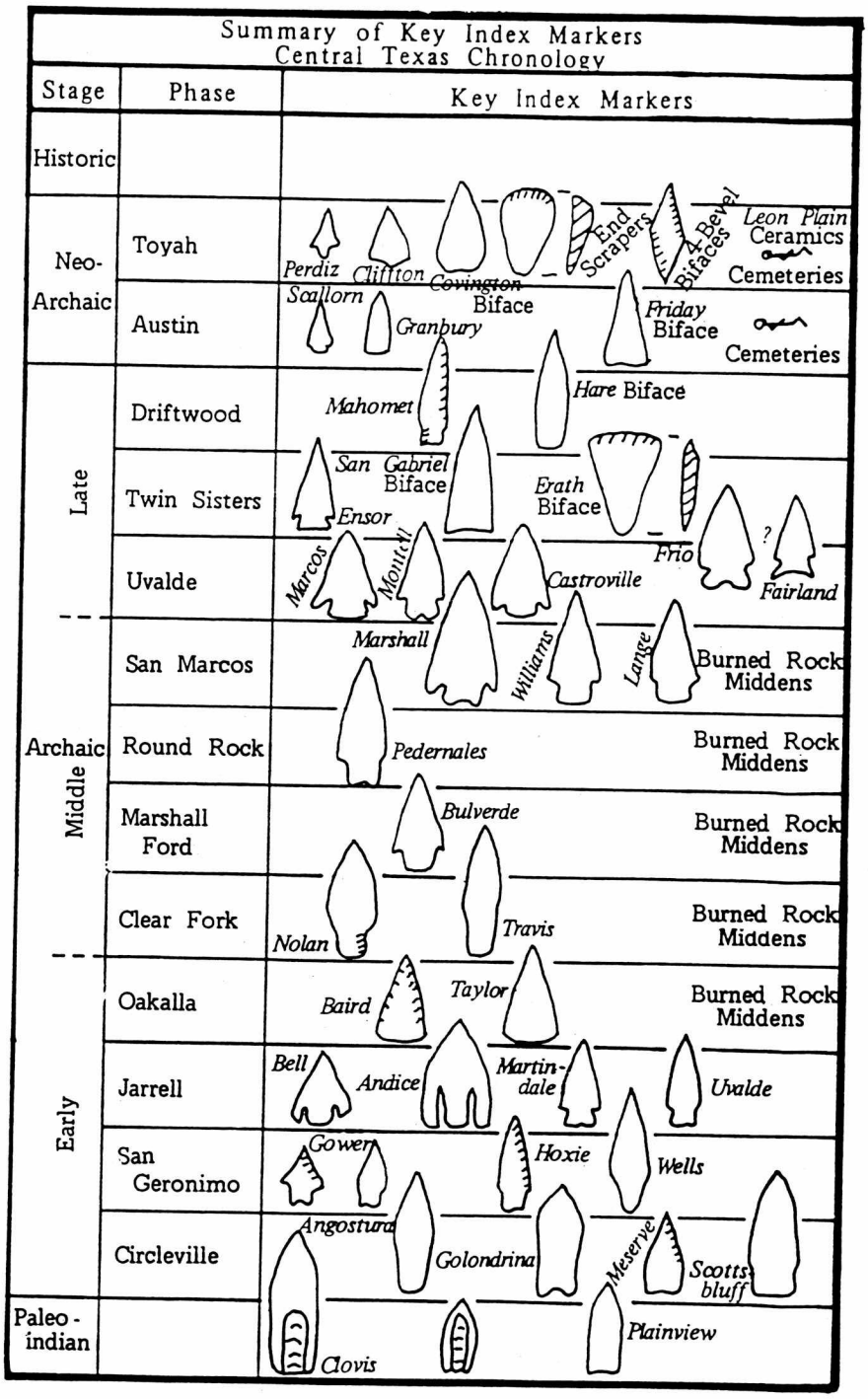
As a result of archaeological investigation, predominantly conducted during the past 50 years, a temporal framework has been constructed which plots changes in prehistoric lifeways for the last 10,000 years. In general, the past has been divided into four periods beginning with the Paleo-Indian, and followed by the Archaic, Late Prehistoric and finally, Historic.

The Paleo-Indian Period has been dated from before 10,000 to approximately 8,500 years ago. It is characterized by nomadic hunters and gatherers procuring now-extinct large animals, including mammoth, mastodon, large bison, camel and horse, and collecting plant materials growing in the cooler and perhaps wetter post-glacial environment. Sites dating to this time period are often recognized by diagnostic Clovis, Folsom and Plainview projectile point types.

Following the Paleo-Indian Period, the Archaic Period is marked by the increased reliance on smaller game animals, such as deer and rabbits, due to the growing scarcity and extinction of the larger forms. The Archaic Period lasted from about 8,500 years ago until approximately 1,250 years ago. During this span of over 7,000 years, prehistoric groups adapted to changing environmental regimes that cycled from dry to moist with their overall trend being toward more xeric conditions. Changes in prehistoric adaptation were often accompanied by changes in projectile point shapes, thus providing an index marker for specific time periods. Based on these changes, Weir (1976) and Prewitt (1981) have subdivided the Archaic into 5 or 11 phases respectively. Each phase has one or more projectile point types that serve as markers for that period (Table 1). Archaic projectile points are dart points which were hafted on short spears or darts and thrown with the aid of a spear thrower or atlatl.

The Late Prehistoric Period began approximately 1,250 years ago when the Central Texas groups adopted bows and arrows, which eventually replaced atlatls and darts as hunting and warring implements. In addition, the technology of pottery making was introduced. Some horticulture was practiced along some rivers in the northern portion of the region. The Late Prehistoric has been subdivided into two phases, each marked by specific tool types (Table 1).
The expansion of Spanish and French explorations into the Central Texas region marks the end of the Late Prehistoric Period and the beginning of the Historic Period. Aboriginal sites of the Historic Period contain European goods in their inventories. Eventually, all Native American groups were driven from the Central Texas region.

TABLE 1. Central Texas Chronology



(adapted from Prewitt 1981)

EXCAVATION TECHNIQUE

Two units were placed in the rockshelters and three on the terrace flat below. Each rockshelter unit was dug in arbitrary 10-cm levels. The terrace units were dug in 20-cm levels. All fill was screened through quarter-inch hardware cloth. Descriptions and plan drawings were recorded for each level and a representative profile was drawn for each pit. Color, as well as black and white, photographs were taken to document features, and more generally the work in progress. A daily journal was kept to describe the excavation. A site map was drawn from distance and angle readings taken by transit and stadia rod.

THE SITE

The Beecroft Site, 41HY197, consists of five rockshelters, one burned rock midden and a terrace flat contained in a stretch of the right (north) bank of an unnamed tributary to the Blanco River (Figure 1). Surface indications of relic hunting were widespread. The burned rock midden had suffered immensely and it was easy to discern where the holes of one relic hunter were being filled by the backdirt from another. The rockshelter deposits were in similar condition. Only the terrace flat beneath the shelters and west of the midden appeared intact.

THE SHELTERS

Shelter A

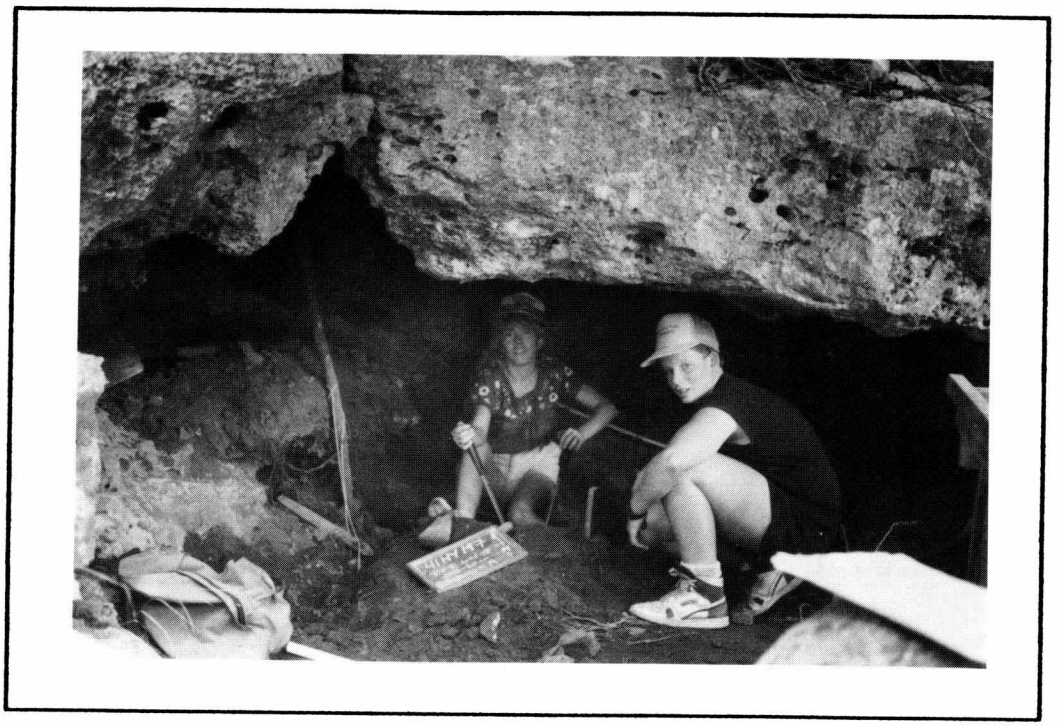
Shelter A (Figure 1) is in the upstream portion of the immediate cliff face. It is 6 meters wide, 3 meters deep and 1.5 meters high. Large boulders have trapped dirt and debris to form a small level bench in front of the shelter. A 1x1-meter test pit (TP1) was placed between two potholes near the center of the shelter in the hopes that some intact deposits could be uncovered (Figure 2a). With the completion of this unit, no intact deposits remain in this shelter.

Test Pit 1 contained cultural deposits to a depth of 80 cm at which time the limestone floor of the shelter was uncovered (Figure 3). Levels 1 and 2 (0-10, 10-20 cm) consisted of the backdirt from relic hunting. Level 3 (20-30 cm) yielded the first fairly intact deposits in a dark grey clay loam matrix. Disregarding the upper two levels, Level 3 contained the highest quantity of burned rock (40%) and the only core fragments recovered from this unit. Two utilized flakes, one biface edge fragment and two Scallorn arrowpoints comprised the remaining tools. The Scallorn arrowpoints suggest this level dates to the Austin Phase, ca. 1,250-650 years before present (BP).

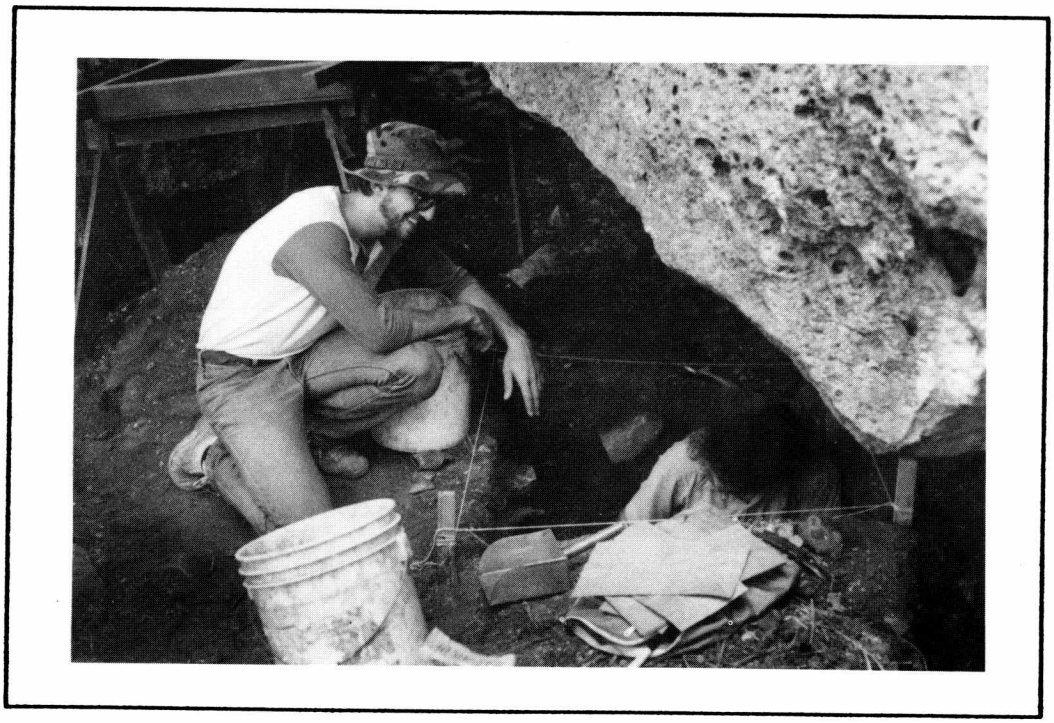
Level 4 30-40 cm, still in the dark grey clay loam, had a slight increase in the number of flakes and chips but a decrease in the frequency of all other tool forms and burned rock. Level 5 (40-50 cm), had the highest quantity of debitage in the test pit and also contained the most utilized flakes (n=4) and biface tip fragments (n=3). In addition to these tools, one biface edge fragment and a Late Archaic age dart point, reworked into a knife, were recovered.

Level 6 (50-60 cm) contained the lowest extent of the dark grey clay loam deposits and a marked decrease in the amount of cultural material. A single utilized flake, a biface midsection and an Ensor dart point were the only tools recovered from this level. The Ensor dart point indicates a Twin Sisters Phase (1800-1400 BP) occupation for this level.

At the top of Level 7 (60-70 cm), the deposits change to an orange-tan sandy clay which continues to the bedrock at the bottom of Level 8 (70-80 cm). The cultural materials in Levels 7 and 8 were restricted to lithic debitage with counts of six and seven in each level respectively. A small amount of burned limestone was recovered from Level 7.



A



B

Figure 2. Photographs of the entrance and test pit placements in: A, Shelter A, Test Pit 1; B, Shelter B, Test Pit 4.

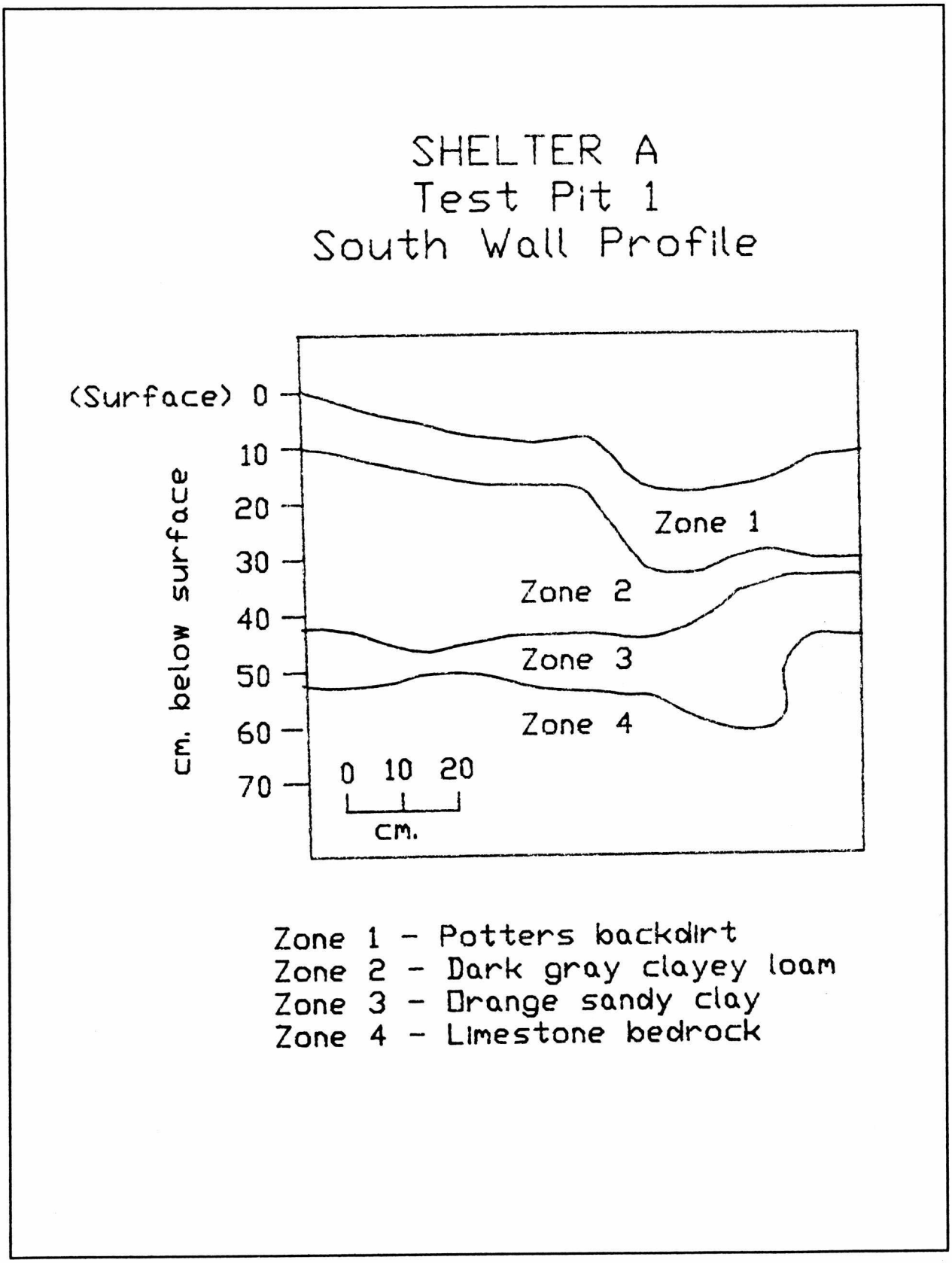


Figure 3. South wall profile of Test Pit 1 in Shelter A, showing the color and textural differences of the deposits.

In addition to lithic items, Test Pit 1 in Shelter A also contained faunal remains including freshwater mussel, two types of terrestrial snails and the bones of deer, rabbit and small rodents. Most of the remains probably resulted from food gathering and processing activities by the shelter inhabitants. Mussel, deer and rabbit were definitely food items and, in the cases of deer and rabbit, were found in all levels of the unit. *Rabdotus* snail shells were also recovered from all levels. Mussel shell was restricted to the upper five levels of the pit. No estimate of the percent each food item may have contributed to the diet of these people was possible due to the small sample size from each level and the lack of comparable deposits from other areas of the shelter.

Shelter B

Shelter B is located 5 meters downstream from A and approximately 1 meter lower in elevation (Figure 1). The shelter is 10 meters long, 5 meters deep and 1 meter high. A small passageway in the rear of the shelter inclines to a domed chimney 3 meters in diameter and 2.5 meters high. No deposits were contained in the rear chamber. The undulating surface of the shelter proper served as a testimonial to the extensive turbation effected by numerous relic seekers.

In an attempt to excavate relatively intact deposits, Test Pit 4 was placed just inside the dripline of the shelter overhang (Fig. 2b). The upper four levels (0-40 cm) were mixed and contained historic debris including whiteware ceramics--probably from a coffee cup. Beginning in Level 5 (40-50 cm), the deposits appeared intact in a dark brown clay loam matrix to a depth of 70 cm where a light tan pebbly sandy clay was hit. This lowest layer continued to the bottom of the rockshelter at a depth of 135 cm (Figure 4).

The upper 40 cm of this test pit consisted of the backdirt of relic hunters and contained no useful materials other than the recent items that marked the extent of this disturbance. Level 5 (40-50 cm) contained the first relatively intact deposits including a small amount of burned rock, debitage, one utilized flake, a biface tip fragment, an Ensor dart point and a Marcos dart point. Both dart points indicate Late Archaic utilization of the shelter. The Ensor dart point is a temporal marker of the Twin Sisters Phase (1750-1400 BP.) and the Marcos dart point marks the Uvalde Phase (2250-1750 BP.). The co-existence of these types in one level may be the result of historic disturbance or, more likely, the feathering of cultural deposits from the two time periods.

Level 6 (50-60 cm) contained a marked increase in the amount of burned limestone to a density not unlike that in the burned rock midden. Mixed with the burned rock were 24 flakes--one of which had been utilized. The high density of burned rock continued through Levels 7 and 8 and probably represent the discard of hearthstones out the front of the shelter. Level 7 (60-70 cm) contained identical amounts of burned rock as Level 6, however, a slight rise in the frequency of flakes occurred. Accompanying material included one biface midsection and a Bulverde dart point. The Bulverde dart point is a temporally diagnostic marker of the Marshall Ford Phase which has been dated between 4100 and 3500 BP.

As in Level 7, Level 8 contained comparable amounts of burned rock to Level 6. Debitage counts were slightly reduced from that in Level 7 and tools were limited to one utilized flake and one biface edge fragment. No time diagnostic artifacts were uncovered.

The deposits changed in Level 9 to a light tan, sandy clay that continued through Level 10 to the shelter bottom. The Level 9 deposits are a transition zone comprised of brownish-tan sandy pebbly clay. Cultural material counts decreased to nearly 50% of that in Level 8 and the only tool recovered was a fragmented dart point similar to the Travis dart point type. The Travis type is indicative of the Clear Fork Phase of the Middle Archaic with specific time parameters of 4600 and 4000 BP.

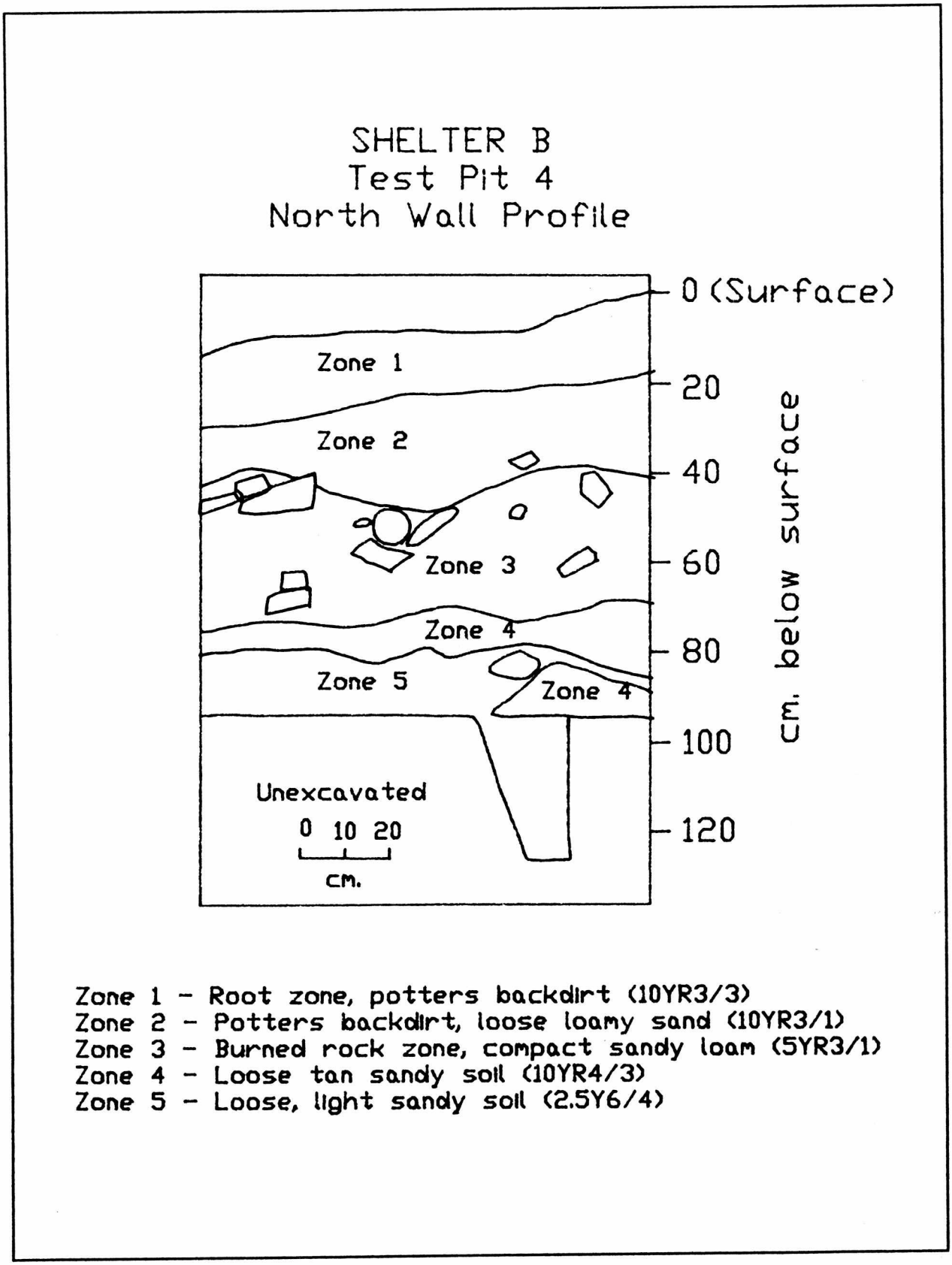


Figure 4. North wall profile of Test Pit 4 in Shelter B, showing the color and textural differences of the deposits.

Level 10 (90-100 cm) deposits consisted of light tan sandy clay which continued to the shelter floor approximately 30 cm below the Level 10 deposits. A total of nine flakes and chips was recovered from the upper five centimeters of this level. The lower five centimeters proved to be devoid of artifacts and were considered to be the bottom of the habitation deposits. No cultural materials were recovered in the auger probe used to determine the total extent of the deposits.

The only other material recovered from Test Pit 4 consisted of three flakes, one utilized flake and a Scallorn arrowpoint dislodged during the cleaning of the wall prior to profiling. The arrowpoint fell from the upper levels but an exact provenience could not be ascertained.

In addition to the lithic materials, the deposits also contained the remains of fauna including freshwater mussel, terrestrial snails, deer, rabbit and small rodent bones. The highest frequency of bone material was recovered from the upper 5 levels while the preponderance of *Rabdotus* snail shell corresponded to the high density burned rock deposits in Levels 6, 7 and 8.

Data recovered from Test Pit 4 indicates that Shelter B was occupied from Middle Archaic through early Late Prehistoric times with specific occupations during the Clear Fork, Marshall Ford, Uvalde, Twin Sisters, and Austin Phases. The midden-like materials in Levels 6-8 suggest that spent items were discarded out the front of the shelter--a common practice in the karst areas of Texas. Because of the badly disturbed condition of the rockshelter deposits, no layout of activity areas could be determined. Additional analysis of the talus materials could identify the activities that had occurred in the shelter by their refuse; however, tying the activities to a particular locus would be impossible.

Shelters C and D.

Continuing downstream 10 meters from Shelter B are two bowl-shaped shelters (Figure 1). Neither shelter contains deposits due to the frontal slope of the floor. Shelter C is approximately 15 meters long, 2 meters high and 2 meters deep. Shelter D is 4 meters long, 2 meters deep and 3 meters high. Both shelters lie at higher elevations than Shelter B, but like B, there is a flat bedrock and boulder bench in front that connects the two. Evidence that might indicate if either shelter had been occupied is totally lacking. Their close proximity to inhabited shelters and the large burned rock midden makes it likely that these two overhangs served as convenient shelters during periods of inclement weather.

Shelter E

Shelter E is located 10 meters downstream from Shelter D and at the foot of the rock face (Figure 1). The shelter is an overhang with a floor composed of the terrace deposits. Holes dug by relic hunters have disturbed a small amount of cultural material and deer bone but apparently did not reach a solid limestone floor. No test units were placed in this area because of the slight frequency of cultural debris and the saturated condition of the deposits due to their low elevation and excess water from recent rains.

THE TERRACE

At the base of the rock face is a terrace 80 meters long and 30 meters wide which has accumulated through the processes of flood deposition from the creek and colluvial deposition from the cliff face, shelters and upland bench (Figure 1). Cultural materials have been introduced into this system at varying degrees with the most obvious being a large burned rock midden at the up-

stream (eastern) end. Less dramatic cultural inclusions are present in the central and western terrace areas in front of the rockshelters.

Burned Rock Midden

Adjacent to the cliff face at the upstream end of the site is a large burned rock midden, 15 meters in diameter and 1.5 meters deep. The eastern edge of the midden is bounded by a small gully and the south and western edges meld to the greater, gently sloping terrace. The primary mounded area of the midden has been virtually destroyed by relic seekers. Progression of this destruction is easily identified by tracing the outlines of intersecting trenches; the initial end backfilled by subsequent digging. Deer bone, biface fragments and the proximal half of a Pedernales dart point were included in the cultural debris left in backdirt piles.

No test units were dug in the mounded portion of the midden since no definitely intact areas could be identified. Cleaning of the most recent holes failed to produce any profile face with definite stratigraphic boundaries. In fact, the midden deposits appeared homogenous from the surface to a depth of 1.3 meters at which time a brown sandy clay was uncovered.

WESTERN TERRACE AREA

The western terrace area consists of a near level portion of the terrace from the western edge of the surface-exposed burned rock midden to the constricted terrace deposits in front of Shelter E. Three units (Test Pits 2, 3, and 5) were placed in the terrace area.

Test Pit 2

Test Pit 2 was located approximately 8 meters west of the exposed burned rock midden and 5 meters south of the cliff face section containing Shelter A (Figure 1). This 1x1-meter unit was excavated in 20-cm. increments in order to quickly probe the terrace deposits and because of the need to use pick-axes to penetrate the dense clays. Level 1 (0-20 cm) consisted of a brown loamy clay to a depth of 10 cm, changing to a black clay loam with a light scattering of burned limestone cobbles (Figure 5). Level 2 (20-40 cm) continued in the black clay loam with a high frequency of burned rock occurring between 30 and 35 cm. No concentration or compact configuration to indicate a hearth could be isolated in the increased burned rock zone. The burned rock may be spillage from the burned rock midden. In addition to burned rock, Level 2 contained 2 secondary flakes, 21 tertiary flakes and 28 chips; a marked increase over Level 1 which contained counts of 0, 3 and 3 respectively. Other lithic artifacts in Level 2 included one utilized flake and two biface midsections. Level 3 (40-60 cm) contained the highest density of burned rock in the unit. From 40 cm to 55 cm was a continuous zone of burned limestone cobbles in a black loamy clay matrix. This zone marks a now-buried portion of the burned rock midden. In conjunction with the rise in burned rock in Level 3 was an increase in the frequency of lithic debitage and tools. Secondary flakes, tertiary flakes and chips increased to counts of 27, 99, and 99 respectively, and tools included one each of utilized flakes, biface tips, biface midsections and biface edge fragments. A uniface and the midsection of an alternately bevelled knife or projectile point was uncovered at 60 cm. below the surface--5 cm. below the bottom of the dense burned rock midden zone. Fragments of the long bone of a deer-sized animal were in close association with these two tools.

Large burned limestone blocks (20x20x10 cm) were uncovered in the southeast corner of the unit at 60 cm and may have been part of a dispersed hearth at the bottom of the burned rock midden.

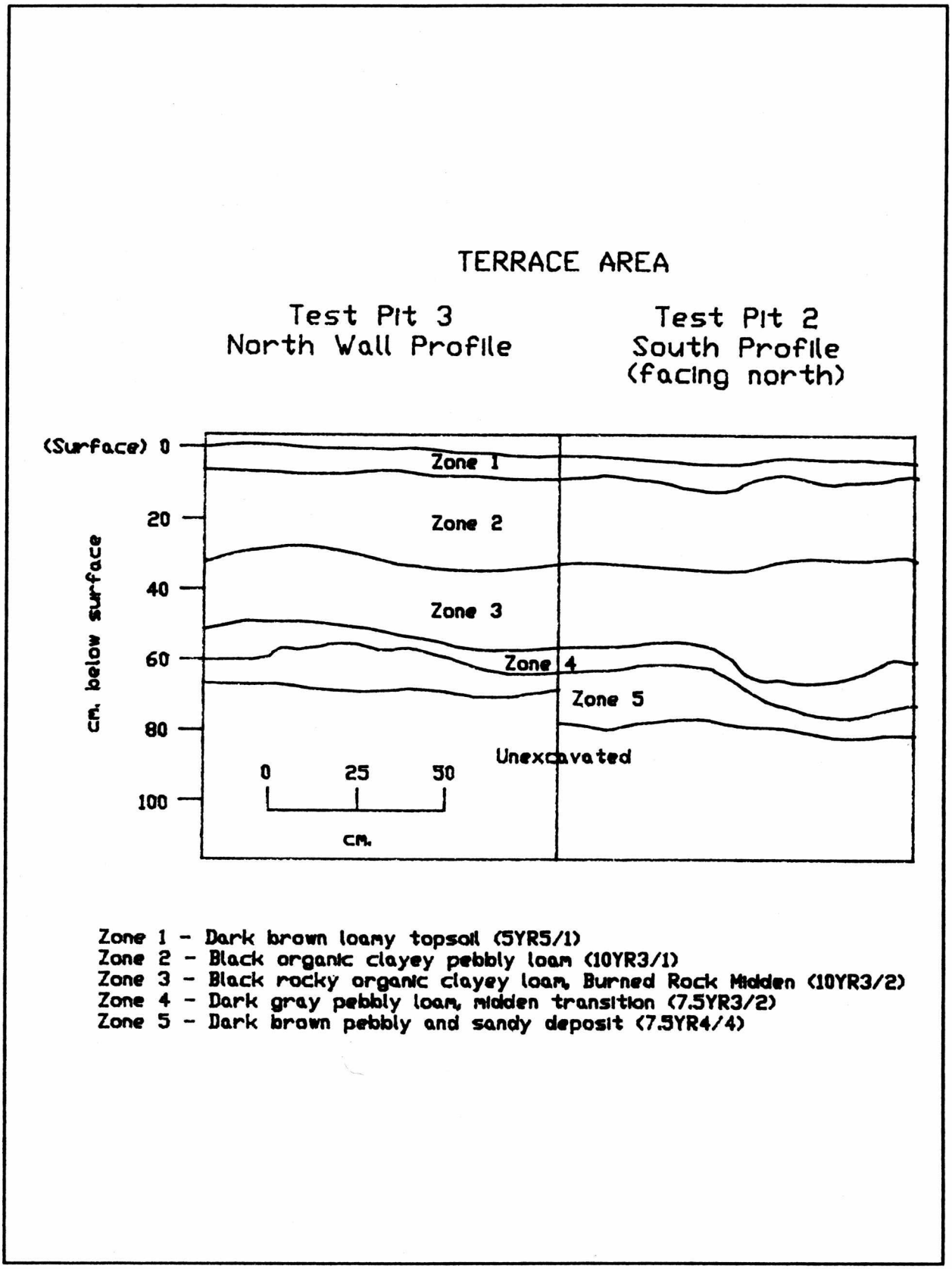


Figure 5. The profile along the common east-west line joining Test Pits 2 and 3 showing the changes in color and texture between the deposits.

In the same vicinity of the uniface-biface-bone association and at a depth of 63 cm in the top of Level 4 (60-80 cm), was a Uvalde-like dart point. The Uvalde type is diagnostic of the Jarrell Phase (6000-5000 BP) and this single specimen represents the oldest occupation yet identified at this site.

Level 4 (60-80 cm) consisted of pebbly and sandy dark brown deposits. Cultural material was contained in the upper 7 cm of the level. The lower portion was devoid of artifacts. Burned rock was all but missing and debitage frequencies plummeted to less than 25 percent of that in Level 3. Tools are limited to two utilized flakes, two biface edge fragments and the single Uvalde dart point.

Faunal remains recovered from Test Pit 2 were limited to two types of terrestrial snails, *Helicina orbiculata* and *Rabdotus morreanus*, and deer. The *Helicina* and *Rabdotus* have mutually exclusive distributions in the Test Pit 2 deposits. *Helicina* was recovered from Level 1 and *Rabdotus* from Levels 3 and 4.

Deer remains were uncovered from all levels of the unit with the largest quantity in Level 1--all unburned bone, followed by Level 2--divided between burned and unburned. Level 3 was next, with a ratio of 3 to 1 of unburned over burned bone; and finally, Level 4 with a miniscule amount of burned bone. None of the levels contained sufficient faunal remains to segregate butchering stations from secondary processing and cooking areas.

Test Pit 3

Test Pit 3 was located on a southwest diagonal with Test Pit 2, sharing the southwest corner of the latter (Figure 1). This 1x1-meter pit was excavated in 20-cm levels to a maximum depth of 80 cm (Figure 5).

Level 1 (0-20 cm) was almost devoid of cultural debris. A mere 4 pounds of burned rock, one secondary flake, one tertiary flake and two chips comprise the total lithic remains from this level. The upper 10 cm of this level was a dark brown loam which changed to an organic-rich black clay loam at 10 cm. Level 2 saw a continuation of the organic clay loam matrix with the cultural materials and larger burned rock fraction increasing in frequency with depth. A burned rock concentration was uncovered in the north half of the unit at a depth of 25-27 cm. The burned limestone concentration was the exposed half of a circular feature 50 cm in diameter that continued into the north wall of the unit. Mixed with the burned rock were fragments of deer bone. Fifteen centimeters east and five centimeters south of the hearth was the distal half of a deer right femur. The unfused epiphysis indicates the animal was a juvenile. The shaft of the femur had been broken in a manner resulting in a spiral fracture, probably for the purpose of extracting marrow. Additional bone fragments were recovered at this approximate depth in other sections of the unit.

Unfortunately, no temporally diagnostic projectile points or tool forms were recovered in Level 2 that would suggest an age for this feature. Artifacts recovered from this level were limited to the flakes and chips resulting from tool manufacture and maintenance. Apart from the burned rock from the hearth, little burned rock was uncovered to a depth of 35 cm when the top of the burned rock midden was hit.

Level 3 (40-60 cm) continued the dense burned rock midden to a depth of 55 cm at which time the soil changed to a dark grey pebbly loam. The majority of Level 3 cultural materials were contained in the burned rock midden deposits. Increased frequencies of flakes and chips paralleled the burned rock increase. The only tools recovered, however, were three biface edge fragments. No temporally diagnostic materials were recovered.

The soil change noted at the base of the burned rock midden in Level 3 forms a transition to a pebbly and sandy dark brown deposit in Level 4 (60-80 cm). This matrix is the same as that uncovered in Test Pit 2, Level 4, and also exposed below the burned rock zone in the relic hunter's trenches in the midden proper.

As in the case of Test Pit 2, the Level 4 deposits were almost devoid of cultural materials. Level 4 contained no burned rock or tools and only one secondary flake, four tertiary flakes and five chips.

Test Pit 3 parallels the trends identified in Test Pit 2. The distribution of faunal materials is tied to the presence of a hearth in Level 2 and the burned rock midden deposits of Level 3. *Helicina* snails comprise the sole terrestrial snail species in Level 1; decreasing in frequency in Level 2 as *Rabdotus* enters in and finally disappears in Level 3 when *Rabdotus* peaks. *Rabdotus* continues into the upper deposits of Level 4. Deer remains reached a highest count in Level 2, in association with the circular hearth, but is almost nonexistent in the burned rock midden deposits of Level 3. No small mammal remains or fresh water mussel was recovered from the Test Pit 3 deposits.

Test Pit 4

Refer to the section "Shelter B", paragraph 2.

Test Pit 5

Test Pit 5 was located 3 meters south and 9 meters west of Test Pit 3 near the break in the flat terrace (Figure 1). The first two arbitrary levels were dug in 20-cm increments followed by six 10-cm levels for a total depth of 100 cm. Due to the scantiness of the cultural materials, the 10-cm levels have been combined into 20-cm analysis units. Level 1 (0-20 cm) consisted of a brown clay loam containing only one secondary flake and one chip. Level 2 (20-40 cm) consisted of a darker brown clay loam with an increase in cultural material. In addition to two pounds of burned rock were two secondary flakes, four chips, one core, and two biface edge fragments. No temporally diagnostic artifacts were recovered from Level 2, thus no age assignment could be made.

Level 3 (40-60 cm) continued the Level 2 dark brown clay loam with a comparable amount of cultural material. Burned rock increased to five pounds and secondary flakes, tertiary flakes and chips had counts of two, eight and four respectively. Tools recovered from this level included a biface midsection and a Scallorn arrowpoint. The Scallorn type is a marker of the Austin Phase which has been dated between 1250 and 650 BP.

Level 4 (60-80 cm) contunued in the dark brown clay loam. Burned rock frequency increased to that recovered from the hearth level of Test Pit 3 (Level 2), however no definite concentration suggestive of a feature could be discerned. Mirroring this rise in burned rock frequency were flakes and chips with one secondary flake, 18 tertiary flakes and 17 chips. A single biface tip was the only tool recovered.

Level 5 (80-100 cm) contained the transition from the dark brown clay loam to a brown pebbly sandy deposit marked as the bottom of the site in Test Pits 2 and 3. A small amount of cultural material was retrieved from the dark brown clay loam deposits. This consisted of two secondary flakes, three tertiary flakes, two chips, one biface base fragment and a Castroville dart point. No burned rock was recovered. The Castroville dart point type is diagnostic of the Uvalde Phase (2250-1750 BP) of the Late Archaic.

In addition to lithic materials, a small amount of faunal remains were recovered from Test Pit 5. No faunal remains were recovered from Level 1. *Rabdotus* and *Helicina* co-occured in Level 2 with counts of three and seven respectively. Levels 3 and 4 contained *Rabdotus* in counts of one and eight but

neither level contained *Helicina*. Deer remains comprised the only mammalian fauna recovered from the unit with equal amounts of unburned bone at 2.9 grams from Levels 2 and 3 with burned quantities at 2.0 and 1.7 grams respectively. Level 4 contained 1.4 grams of unburned bone and 0.4 grams of burned bone.

Test Pit 5 did not contain deposits comparable to the burned rock midden levels of Test Pits 2 and 3, although Level 4 did produce burned rock amounts similar to that of the isolated hearth level of Test Pit 3. This suggests that a disturbed or dispersed hearth may have been uncovered.

Certain similarities exist between the three terrace pits. With the exception of the organic and burned rock rich deposits of Test pits 2 and 3, each unit contained a brown clay loam upper layer, a dark brown clay loam middle layer, and a brown, pebbly, sandy lower layer. The vast majority of cultural materials, including the burned rock midden deposits, were contained in the dark brown clay loam middle layer.

TERRACE GEOMORPHOLOGY

The basal brown pebbly sand layer contained at its surface the earliest datable cultural materials--the Uvalde dart point from Test Pit 2, Level 4. The Jarrell Phase (6000- 5000 BP), indicated by this point type, probably represents the first available time period that the terrace area could be occupied. The pebbly, sandy deposit is undoubtedly a gravel bank deposit, indicating the stream once flowed near the base of the cliff. Upon retreating to the opposite side of the drainage, overbank flooding deposited the clay layers representing the first stable terrace surface. In addition to the alluvial materials, silts and clays from the upland bench above the rockshelters were transported as colluvium onto the terrace. The gully at the eastern end of the burned rock midden, and the smaller drainway between Test Pit 5 and Shelter E, identify two major avenues used by surface runoff. Even today the terrace receives alluvial sediments, although the amount attributable to colluvial processes has increased due to modern land-use practices.

ARTIFACT DESCRIPTIONS

All artifacts recovered during the test excavation of Beecroft Shelter were made of stone. Although some preservation of shell and bone remains were uncovered, no tools or fashioned objects from these materials were found. A total of 1,188 lithic items indicative of manufacture, maintenance or finished tools have been analyzed.

Debitage

Lithic material removed during the process of tool manufacture and maintenance is divided into five categories; primary flakes, secondary flakes, tertiary flakes, chips and cores. A primary flake is defined by the presence of cortex or outer rock surface on 100% of the striking platform and dorsal surface of the flake. A secondary flake has less than 100% cortex on either the striking platform or dorsal surface, and a tertiary flake is totally devoid of cortex. A chip consists of a fragment of a flake that does not contain the striking platform and therefore, cannot be grouped according to the criteria of a flake. A core, or in the case of the Beecroft material, core fragment, is a cobble of chert that has been reduced through the removal of flakes.

The Beecroft materials contained no primary flakes, 144 secondary flakes, 451 tertiary flakes, 520 chips, and 5 core fragments. For the most part the lithic material was tan to gray chert which is locally abundant on the eroded valley margins. Other chert types noted include a banded tan and brown fine

grained chert locally available but more common to the southwest (Glenn Goode, personal communication).

The absence of primary flakes often indicates that lithic materials were transported to a site after being tested and initially reduced or shaped at the source outcrop or another site. In the case of the Beecroft material, the lack of primary flakes may be a result of the small sample size.

The five core fragments--often called chunks--exhibit intersecting and truncating flake scars attributed to flake production technology or early stage bifacial reduction technology where an odd shaped cobble is reduced until a subrounded tabular form is achieved. Both technologies are represented by the finished artifacts at the site, rendering the subgrouping of the core fragments impossible.

Utilized flakes

Utilized flakes are flakes that have undergone little, if any, alteration or shaping prior to use. The Beecroft lithics contained 18 such specimens, the majority (n=14) of which were contained in the rockshelters. Those specimens (n=4) not from shelter deposits were from Test Pit 2 at the edge of the burned rock midden.

The use edges on these 18 utilized flakes display minute flake scars removed primarily from one surface of the implement. Such tools were used for the duration of a task and then discarded, rather than stored for use at another time.

Unifaces

A uniface is a tool which has been intentionally shaped or sharpened by the removal of flakes from one surface of the implement. Such tools served functionally as scrapers and, less often, knives. A single uniface was recovered at Beecroft (Figure 6a). This tool was made on a large secondary flake with retouch limited to the dorsal surface. The proximal end, containing the striking platform, is rounded with lateral edges converging to a point at the distal end. One lateral edge displays minute fractures on the ventral surface from the tip to approximately halfway down the proximal end. Use-wear of this kind is often attributed to cutting activites, suggesting this tool functioned as a small knife. The specimen was found in Test Pit 5, Level 3, at a depth of 58 cm below the surface.

Bifaces

Bifaces are implements that have flakes removed from both surfaces along an edge. The term is used to describe the lithic reduction sequence in which a tool is fashioned from a cobble through a series of stages, each defined by the thickness, amount of cortex, and mode of flaking. The reduction sequence is accomplished by the equal removal of flakes from both surfaces of the piece, and the finished product is usually lenticular in cross section. Shortcuts were often taken by the flintknapper whereby a large flake rather than a cobble was reduced to tool form. Finished products from this technique include such functional classes as knives, gouges, dart points, and large drills.

Specimens from Beecroft fit into the bifacial categories of knives, dart points and dart point preforms. Since no complete knives or preforms were recovered, these two groups have been integrated into a general biface category that has been subdivided based on the remaining portion of the artifact. In this fashion, the bifaces recovered from Beecroft fall into the classes of tips, midsections, base/corners (Figure 6,b) and edges, with counts of 10, 7, 1, and 12 respectively. The highest frequency of tips came from Shelter A (n=6); midsections from Test Pit 2 (n=3); and edges being evenly distributed between

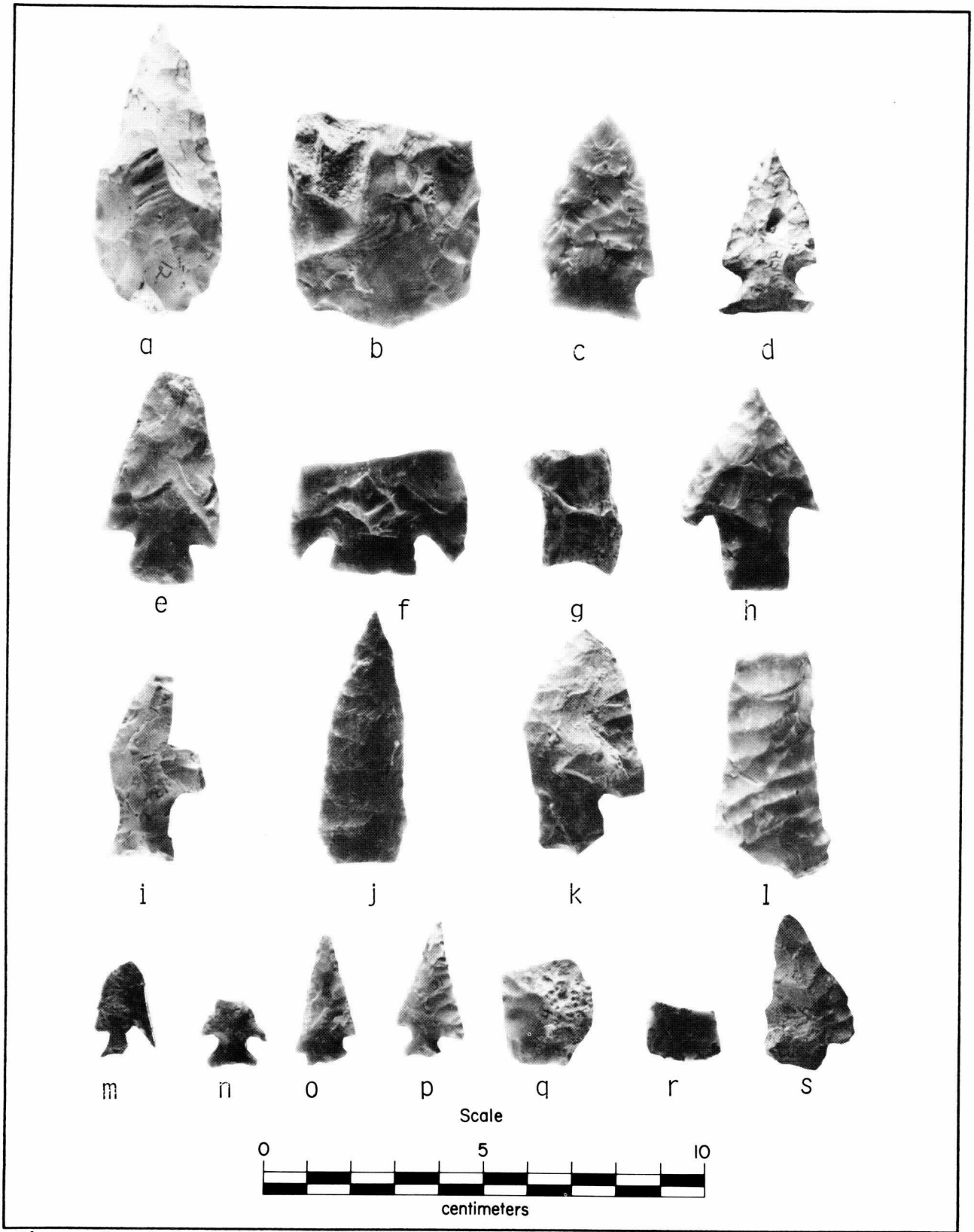


Figure 6. Selected artifacts recovered during test excavations, Beecroft Site, 41HY197. a, uniface; b, biface base; c-d, Ensor dart point; e, Marcos dart point; f, Marshall-like dart point; g, Pedernales dart point; h, Bulverde dart point; i, Uvalde-like dart point; j, Miscellaneous Type 1; k, Miscellaneous Type 2; l, Miscellaneous Type 3; m-p, Scallorn arrow point; q-s, arrow point preforms.

Shelter A (n=3), Test Pit 2 (n=3), and Test Pit 3 (n=3). In addition, two edges came from Test Pit 5 and the remaining one from Shelter B. Many of the tips are probably broken dart points, but the remainder of biface fragments could represent discards from failed attempts at lithic reduction.

Projectile Points

As mentioned earlier, dart points are a class of biface but, due to their particular attributes, are suited for form-time associations and are important in determining the age of a site or deposit. Because of their chronological value the dart points of bifacial manufacture are discussed along with the arrowpoints of core/flake manufacture. The projectile points have been identified following the typological definitions of Suhm and Jelks (1962) and Turner and Hester (1985).

Dart Points

Ensor - 2

These projectile points have slightly convex lateral edges, square shoulders formed by shallow side notches, and straight bases (Figure 6, c and d). Blades have lenticular cross sections and the bases are symmetrically thinned. Both specimens are missing one basal corner, and one is badly burned. The first, Lot 6, is 4.8 cm long, 2.8 cm wide and 0.5 cm thick. The second, Lot 22, is 3.9 cm long, 2.2 cm wide and 0.6 cm thick.

Marcos - 1

This specimen has straight blade edges that are alternately bevelled from resharpening. Shoulders are lightly barbed and the stem expands due to narrow corner notching (Figure 6, e). The base is straight and thinned. Because of the bevelled resharpening, the cross section of the blade is rhombic. The distal tip is broken with a fracture pattern produced by impact with a hard material. This specimen, Lot 22, is 5.0 cm long, 2.8 cm wide and 0.7 cm thick.

Marshall-like - 1

This specimen consists of the proximal half of a broad bladed projectile point (Figure 6, f). The lateral edges of the remaining blade are convex. Slanting corner notches create a slightly expanding stem and broad, pointed barbs. The base of the stem is straight and thinned. The projectile is fashioned from a flake resulting in a plano-convex cross section. This point, Lot 36, is broken and measures 3.0 cm long, 4.2 cm wide and 0.8 cm thick.

Pedernales - 1

This specimen consists of the stem and fractured shoulders of a Pedernales dart point (Figure 6, g). Fractures resulting from impacts with hard materials have removed the majority of the distal end, one shoulder, and the barb or corner of the remaining shoulder. The stem has straight edges and the base is concave with broad thinning flakes removed from both surfaces. This specimen, found on the surface, is now 3.0 cm long, 2.6 cm wide and 0.7 cm thick.

Bulverde - 1

This projectile point has a reworked blade with recurved lateral edges, short, symmetrically placed barbs, and long, chisel shaped stem (Figure 6, h). The stem edges and base are straight. Basal thinning has been accomplished by the removal of one large broad flake from one surface and two long narrow flakes on the other. This specimen fits well into the Bulverde dart point type. This point, Lot 24, is 4.8 cm long, 3.2 cm wide and 0.7 cm thick.

Uvalde-like - 1

This fractured specimen consist of one lateral blade edge, opposing square shoulder, expanding stem and slightly concaving base (Figure 6, i). The distal tip was removed by a large burin blow, probably the result of impact with a hard substance (rock) and one shoulder was lost during manufacture. The stem edges and base are slightly dulled but not ground. The overall outline and thickness suggests this projectile point is of the Uvalde type. This specimen, Lot 13, is 4.3 cm long, 2.4 cm wide and 0.8 cm thick.

Miscellaneous Type 1 - 1

This specimen consists of the blade, shoulders and partial stem of a lanceolate dart point (Figure 6, j). The blade edges are slightly convex and symmetrically fashioned, giving the blade a lenticular cross section. The shoulders are rounded and defined solely by the abrupt contracting angle of the stem edges. The base is missing, but the other characteristics suggest that this projectile point was similar to those defined as Travis dart points. This specimen, Lot 26, is 6.0 cm long, 2.1 cm wide and 0.7 cm thick.

Miscellaneous Type 2 - 1

This specimen consists of the blade, one shoulder, and stem of a dart point that has been fashioned into a knife or scraper (Figure 6, k). The entire specimen curves, following the contours of the ventral surface of the flake from which it was made. One lateral edge is bevelled toward the edge opposite the ventral curve in an effort to straighten the point or to enhance its use as a scraper. The other edge is evenly flaked. The shoulder along the bevelled edge once supported a broad barb formed by a deep narrow basal notch. The other shoulder is completely missing. The stem edges expand slightly and the base has been broken by a force directed from the ventral surface--a consequence of the natural curve of the tool. This specimen, Lot 5, is 5.2 cm long, 2.6 cm wide and 0.7 cm thick.

Miscellaneous Type 3 - 1

This specimen is a broken lanceolate form missing the distal tip and both basal corners (Figure 6, l). The blade has been bevelled by the masterful execution of parallel diagonal flaking from upper right to lower left on both surfaces. Blade edges are concave and recurve abruptly to the shoulder area of the lanceolate. Only a small segment of the haft edge is present and it has been ground. The termination of a basal notch or concavity is centered between the broken ears of the base. This specimen appears to be a skillfully reworked Plainview or Golondrina point. Fracture patterns along the lateral edges of the resharpened blade suggest that its final usage was that of a knife rather than a projectile point. At present, this tool, Lot 12, is 5.4 cm long, 2.7 cm wide and 0.8 cm thick.

Arrowpoints

Four arrowpoints and three arrowpoint preforms were recovered during the test excavation at Beecroft.

Scallorn - 4

All four specimens are corner notched, expanding stem forms attributable to the Scallorn arrowpoint type (Figure 6, m-p). One specimen (Lot 3) is badly burned but exhibits straight lateral edges and pronounced, sharp barbs. Another, Lot 3, is missing the distal tip and has straight lateral edges, slight barbs and a straight, wide base. The third (Lot 28) is missing the basal corner of a concave base. The blade edges are slightly serrated and shoulders are square with incipient barbs. The fourth (Lot 31) has been reworked causing the blade to slant asymmetrically from the shoulders. The shoulders are square and the corner notching is very shallow, creating a broad, short stem with a

straight base. The length, width and thickness of each specimen are: Lot 3, 2.3 cm long, 1.5 cm wide, and 0.3 cm thick; Lot 3, 1.6 cm long, 1.6 cm wide, and 0.4 cm thick; Lot 28, 3.0 cm long, 1.5 cm wide, and 0.5 cm thick; and Lot 31, 3.2 cm long, 1.7 cm wide, and 0.4 cm thick.

Arrowpoint Preforms - 3

The three arrowpoint preforms are subrectangular in outline (Figure 7, q-s). Two are missing the distal tip while the third is missing a basal corner. All are bifacially worked although one displays the ventral surface and dorsal cortex of the flake from which it was made. All three specimens are from Lot 4 and length, width and thickness measurements for each are: 2.4 cm, 2.2 cm, 0.5 cm; 1.5 cm, 1.8 cm, 0.3 cm; and 3.6 cm, 2.1 cm and 0.5 cm.

SUMMARY AND RECOMMENDATIONS

The excavation of the Beecroft site complex uncovered the debris reflective of camp activities including tool manufacture and maintenance, cooking and processing, and discard of spent foodstuffs for intermittent site occupations during Archaic and early Late Prehistoric periods. Widespread disturbance of the site deposits was verified for the rockshelter deposits and the central portion of the burned rock midden. Vandalism has not yet affected the buried midden areas or the terrace in front of the shelters. The amount of information lost to vandalism is high as indicated by the stratigraphic integrity once contained in Shelters A and B. Both shelters are now devoid of any integrity in the deposits as all strata have been mixed. Excavation revealed the shelters were occupied as early as the Clear Fork Phase (4600-4000 BP), then throughout the remainder of the Archaic Period and into the Late Prehistoric.

The terrace area in front of the shelters contains small hearths and a buried portion of the burned rock midden. In this area the deposits appear to retain stratigraphic integrity, and preservation of bone and shell materials is quite good. This area of the site holds the most promise for significant information on the lifeways of Archaic, and possibly Late Paleo-Indian, eras and the inhabitants occupying this region. The single reworked Plainview or Golondrina Late Paleo-Indian point might hint at late Pleistocene-age deposits in the terrace area. However, it could also represent the rejuvenation of a broken, yet serviceable tool collected and transported to the site by Archaic age inhabitants.

The limited nature of the excavation precluded the recovery of large bodies of data on subsistence activities. Enough, however, was gleaned to recognize certain patterns defined in detail at other sites along the Balcones Escarpment of the Edwards Plateau. Specifically, these include the accumulation of a burned rock midden through the successive cooking and heating of plant and animal foodstuffs. In addition, the area adjacent to the midden contains small hearths and processing areas. The shelters were occupied during the times of midden and adjacent area utilization, probably affording protection during times of inclement weather. Foodstuffs identified include rabbit, deer, freshwater mussel and possibly land snail. No plant remains were recovered but this can be attributed to the recovery techniques implemented and poor preservation in the clayey deposits.

RECOMMENDATIONS

Those areas of the site most visible and alluring to artifact collectors, such as the burned rock midden and rockshelters, no longer contain significant or unique information concerning the prehistoric utilization of this area by man. Due to the obvious destruction of these areas, vandalism will probably decrease or cease altogether. The less attractive sections of the site, such as the terrace and buried edges of the midden, have not yet been probed by relic seekers and probably will not be disturbed due to the work and time needed to uncover

artifact-bearing deposits. It is these less visible areas that hold the potential for significant information on the lifeways of prehistoric man. Even these areas are diminished in the ability to produce important interpretive information since the corresponding data from the shelters and main burned rock midden area have been lost.

ACKNOWLEDGEMENTS

The information gleaned from the Beecroft Site Complex is the result of the hard work of a special group of volunteers dedicated to the study of prehistoric peoples. This group includes Solveig Turpin, David Robinson, Joe Powell, Abby Treece, Robert McConnell, Wayne and Amanda Bartholomew, Carolyn Spock, Dan Julien, Rosario Casarez, Fred Askew, and Stephanie Bement. A special thanks is extended to Mr. and Mrs. Bert Beecroft and Mr. and Mrs. Nick McNiel for their concern for the cultural resources of the State. Without this concern, the Beecroft Site Complex would have passed out of the grasp of prehistorians and existed only in the collections of relic seekers. The field equipment and lab facilities were made available through the Texas Archeological Research Laboratory, The University of Texas at Austin.

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A STONE PIPE FROM THE LOWER PECOS REGION OF VAL VERDE COUNTY, TEXAS

C. K. Chandler

ABSTRACT

A large, heavily engraved, tubular stone pipe is described and discussed. Stone pipes have a long history of use and held an important place in the cultural activities of many North American Indian societies. This one appears significant for its heavy engraving.

DISCUSSION

The stone pipe reported here is from a dry shelter located on a tributary canyon of the lower Pecos River in Val Verde County (see inset). This region is best known for the extensive rock paintings on the walls of the canyons and shelters depicting a great number of brightly colored shamans and other figures. The large number of shaman figures is indicative of a highly ritualistic culture. Some of the items recovered from the deposits in the dry rockshelters are believed to represent some of the ritualistic practices of the Lower Pecos inhabitants. This heavily engraved stone pipe is thought to have significance in these ritualistic activities.

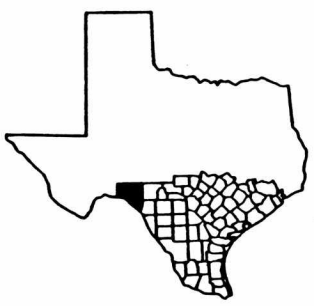
The sacred pipe holds an important part in the mythology and ritual of almost all North American Indian tribes and no great ceremony is complete without it (Powell 1896). Every tribe has a legend to account for the origin of the pipe. The Arapaho have a myth that the sacred pipe was given to their ancestors at the beginning of the world. Sioux tradition holds that the sacred pipe was brought to them by a mysterious young woman from the spirit world. Besides stone pipes, many tribes used pipes of clay or bone, as well as cigarettes fashioned from cane or reed and filled with their own form of tobacco. However, only the stone pipe was considered to be of ceremonial character.

The sacred pipe was generally symbolic of peace and truth. As a peace emblem it was formerly carried by every bearer of a friendly message from one tribe to another and was solemn ratification of treaties. The act of smoking was in itself in the nature of an oath.

Tobacco pipes were often symbols of responsibility within Great Plains tribes. Assumption of a leadership role was often marked by handing the person a pipe. Certain tribes utilized particular pipes as symbols of tribal unity, and a leader of a war expedition was said to be "carrying the pipe."

Tobacco smoke, and sometimes tobacco itself, served as an offering in prayer and established a relationship of mutual obligation between the person praying and the spiritual domain. Tobacco was often sprinkled on stones or rocks of odd shapes in the belief that their form was the work of a great deity. It was also sent as a peace offering to other persons or tribes, or given to someone from whom a favor was expected. Smoking and contemplation was often practiced before attempting something of a serious nature.

ARTIFACT DESCRIPTION



This artifact (Figure 1) is a tubular style pipe made of an elongated oval travertine stone cobble. The exterior is deeply engraved with straight lines of varying lengths, some

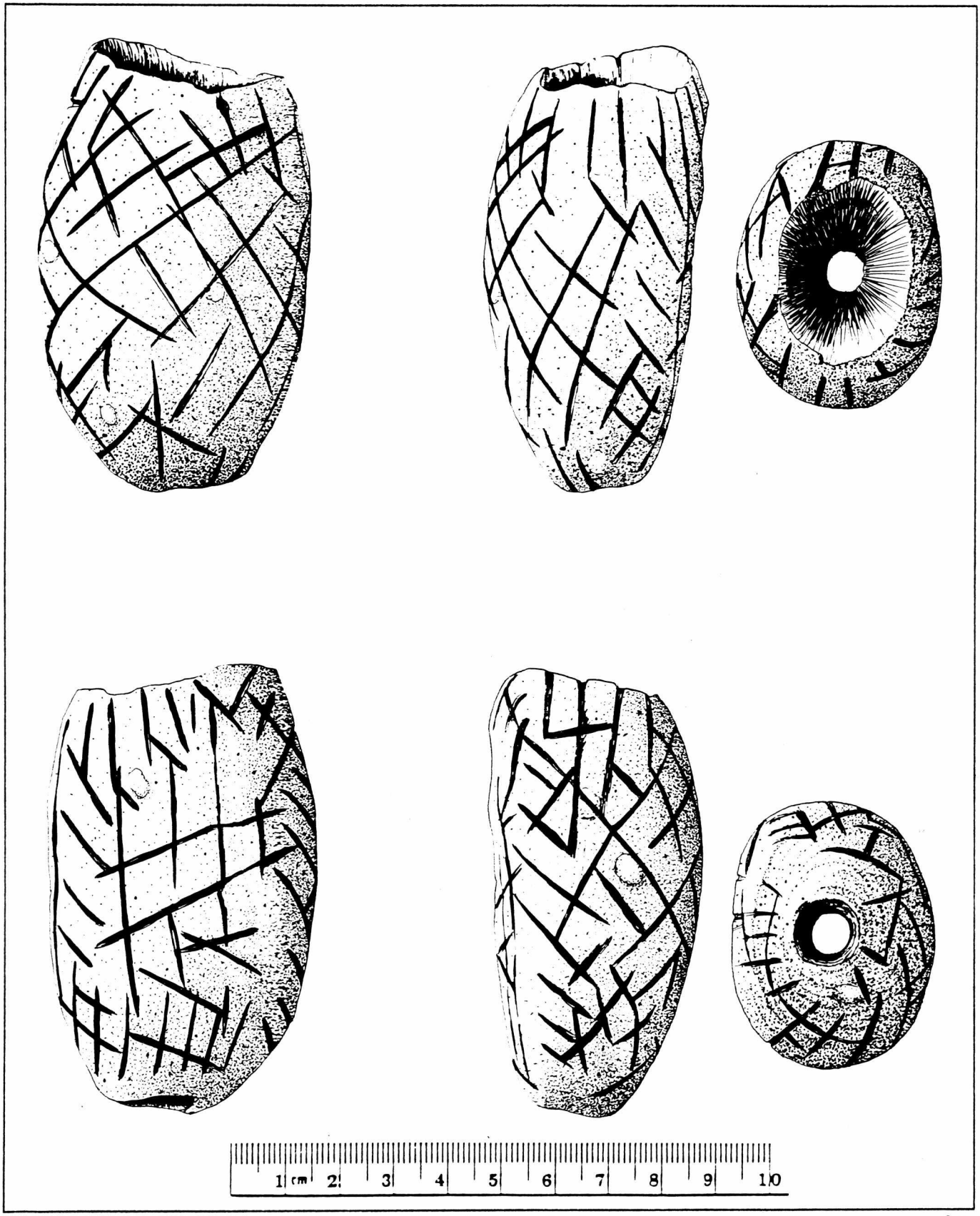


Figure 1. Incised Stone Pipe from Rockshelter in Lower Pecos area. Top row, one side and bowl from top. Bottom row, reverse view and bowl from bottom. George S. Meyer Collection. Drawing by Richard McReynolds.

of which form fairly uniform crosshatching. The exterior is stained over all surfaces with a thin liquid, medium brown stain that was applied after the engraving was completed. The bowl interior is whitish tan and does not appear to have been fired. The bowl is oval with a maximum rim opening of 34 mm and a minimum of 25 mm. The bowl has been formed by gouging instead of reaming and it has a maximum depth of 50 mm. The stem hole is uniformly 11 mm in diameter and shows circumferential striations of having been reamed. Exterior dimensions are: Length, 81 mm, maximum diameter, 49 mm, with a minimum diameter of 38 mm at mid-section. It weighs 144 grams. The exterior shows no evidence of having been pecked or ground to shape it.

This pipe was recovered from a dry rockshelter along the lower Pecos River in the mid-1930s. In addition there was considerable cultural material found in this same shelter, including sandals made of vegetable fiber, woven mat fragments, woven basketry, fragments of finely woven nets, bone and antler tools, a mussel shell pendant, scored ochre and several dart points.

CONCLUSIONS

Tubular stone pipes are rarely found in Texas. Most of those reported are from sites in South Texas and along the Texas coast (Campbell 1947; Martin 1930). Several were recovered at the Loma Sandia site in Live Oak County and most of these were associated with burials. All of these were of undecorated sandstone.

Tubular stone pipes also have been reported from the Lower Pecos area (Ross 1965; Johnson 1964; Schuetz 1961). None of these are known to be decorated. Jackson (1938) reports a large tubular stone pipe from Llano County that was plowed up in a campsite in 1891. This specimen is deeply incised with pole-like ladder elements, a rayed sun disc and projectiles.

As can be seen from these records, heavily engraved or carved stone pipes are rare in Texas archaeological literature. Their presence needs to be made known to add to the data base for study and interpretation of the prehistoric peoples. While stone pipes have a relatively wide distribution, their numbers are small and obviously had limited distribution within a given group. It is commonly known that smoking was an ordinary activity among most groups, which might account for most of the specimens found. However, the larger elaborately decorated pipes may have had a higher status and purpose, such as use by a shaman or medicine man in ceremonial activities or curing rites.

The specimen reported here shows no evidence of ever having been smoked. The bowl is clean and without signs of fire. It may have never been used in an activity requiring it to be smoked, but on the other hand, it may have been used in some ceremonial activity that did not require smoke.

ACKNOWLEDGEMENTS

I wish to extend my sincere thanks to Mrs. Jeanny Meyer for the loan of this specimen for documentation. It is now on loan to the Witte Museum and is displayed with other material in the Lower Pecos exhibit, courtesy of Mrs. Meyer.

I also want to express my appreciation to Richard McReynolds for the excellent drawings.

Much of the information in this report is largely from personal notes made over a period of time from visits to several Texas and Southwestern museums, as well as various publications I was reading while doing other research. I often failed to record the specifics of the source of many of these notes and am unable to reference them with accuracy. I acknowledge borrowing heavily from early Bureau of Ethnology reports, specifically Volumes 1, 2, and 3 for 1892-1893.

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LITHIC ARTIFACTS FROM A LATE PALEO-INDIAN SITE IN TERRELL COUNTY, TEXAS

Clay M. Garrett and Timothy D. Smith

ABSTRACT

This report describes surface-collected lithic artifacts from a site near Washboard and Isinglass Canyons in Terrell County, Texas. The presence of "Plainview" type dart points may denote human occupancy ca. 10,000 years ago. This represents the first documentation of a Paleo-Indian site in Terrell County.

INTRODUCTION

Washboard and Isinglass Canyons are located in the east central periphery of the Chihuahuan Desert. Washboard Canyon is a primary drainage beginning south of Sanderson, Texas and terminating at the Rio Grande River. Isinglass Canyon to the immediate east is also a large drainage beginning at approximately the same latitude, and terminating at Washboard Canyon just northwest of San Francisco Creek (Figure 1).

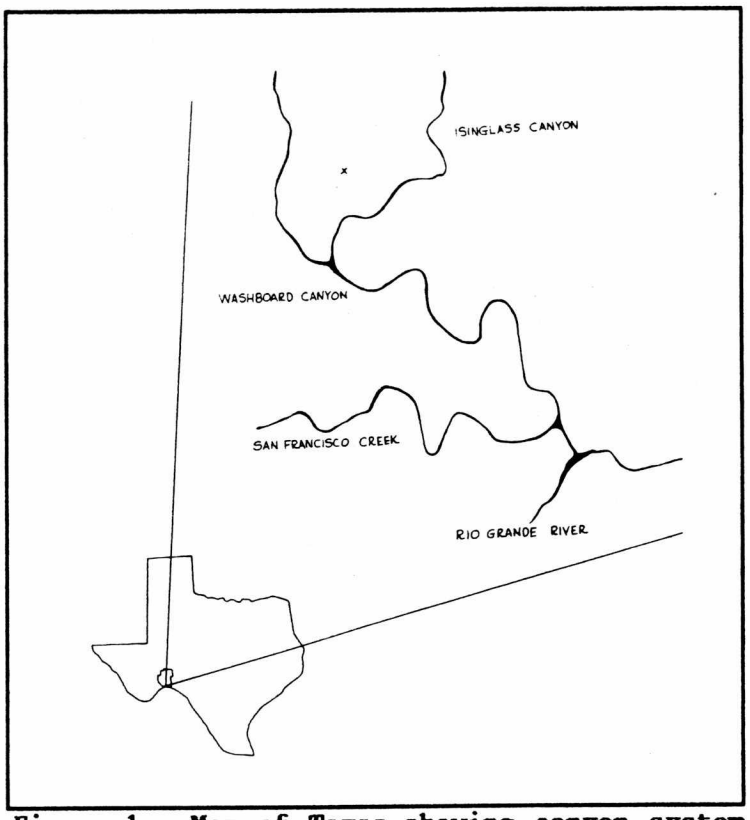

Figure 1. Map of Texas showing canyon system in southwestern-most corner of Terrell County. Site location is marked by an X.

Elevational ranges for both canyon areas are from near 250 meters to in excess of 550 meters. Throughout their length the canyons have a myriad of small side canyons which dissect the edges of the large plateaus. These plateaus probably provided excellent campsites for early man in that they were reasonably

negotiable and in close proximity to water and rockshelters. Additionally, rich faunal diversity and abundant lithic materials must have attracted them to the canyon.

It has been well documented that the environment in the northern Chihuahuan Desert was undergoing gradual change throughout the Holocene Epoch. In the lower canyons of the Rio Grande, the xeric oak-juniper woodlands that were, at one time, widespread and common during the early Holocene were slowly being replaced by other xerophytic types of trees and shrubs, as well as desert scrub communities (Mallouf 1986:70; Van Devender 1986:6). Currently the plateaus support a diverse group of plants, with dominant species being creosote (*Larrea tridentata*), purple sage (*Leucophyllum frutescens*), lechugilla (*Agave lechugilla*), Texas sotol (*Dasylirion texanum*) and a variety of cacti. Although there is a relative abundance of native flora, the plateaus hold little topsoil, due to erosion. The causes of erosion in this area are not entirely understood; however, Bryant (1977:16) reported that pollen records at the Devil's Mouth site (Val Verde County) suggested that major climatic changes were not the suspected cause. While it is known that widespread alluvial erosion in this region dates just prior to 4,000 B.P., the actual length of the erosional period is unknown. In addition to natural erosion, the introduction of grazing herbivores such as cattle, sheep and horses in the last century have resulted in vast denuded areas. The plants consumed by these animals are predominantly grasses, which are most effective at holding topsoil.

PREVIOUS WORK

In excess of four hundred archaeological sites have been documented in Terrell County (C. K. Chandler, personal communication); however, while previous work is relatively extensive, Terrell County has not attracted as much attention as Val Verde County to the immediate east, where Bonfire Shelter produced paleolithic artifacts from relatively undisturbed stratigraphy as well as the remains of approximately 800 extinct bison. Seminole Canyon lies in close proximity to Bonfire Shelter and is well known for its rock art and lithic artifacts. In the easternmost portion of Val Verde County large scale salvage archaeology preceded the filling of Amistad Reservoir. The negative relief drainage of Washboard, Isinglass and their side canyons offered an immense area of habitat very similar to that of the Pecos River region in Val Verde County. It is possible that Washboard and Isinglass Canyons were active waterways during the early Holocene, and it is reasonable to consider the possibility that Terrell County harbors a dry cave of the magnitude of Bonfire Shelter.

THE SITE

The site is situated approximately two miles north of the Rio Grande River on a T-1 terrace between Washboard and Isinglass Canyons. This open site consists of numerous hearth features. No attempts were made to define the limits of this site, as lithic artifacts and debitage were observed over large areas, surrounding the areas of apparent concentrated occupation. The presence of additonal late paleolithic artifacts from a nearby site (Garrett and Smith, unpublished data) lend credence to our contention that this is a late Paleo-Indian campsite, as opposed to an astronomical coincidence of intrusion.

ARTIFACTS

The lack of stratigraphy and the evidence of recent activity by collectors warranted a preliminary surface collection so that additional information concerning the prehistory of the canyon could be preserved. Artifacts recovered from

this area consist of projectile points, knives, choppers, scrapers, gravers, and unifacial and bifacial tools. While many various tools have been recovered, we felt it necessary to limit the type descriptions to diagnostic artifacts that are of Late Paleo cultural manufacture (Figure 2).

Plainview/Meserve type (Figure 2-A) - The material is grey and white Edwards Plateau flint. The total length is 42 mm. The maximum width is 19 mm located at midbody. The maximum thickness is 4.7 mm. The weight is 3.5 grams. The blade is transversely flaked and has a right-hand bevel. Workmanship is excellent. A shallow basal thinning flake, resembling a flute, is centrally placed on the reverse face and extends beyond the hafting area. Heavy basal smoothing is evident.

Plainview type (Figure 2-B) - The material is grey and white Edwards Plateau flint. The total length is 33 mm. The maximum width is 22 mm, located at the base. The maximum thickness is 4.9 mm. The weight is 4.1 grams. The blade has been reduced by unifacial beveling, as opposed to alternate beveling. Remnants of original workmanship is of high quality. It is interesting to note that the flaking on the obverse face is of a broad collateral nature, similar to that of a type excavated from Bonfire Shelter in Val Verde County (Seminole Canyon State Park Museum, personal observation). Multiple shallow basal thinning flakes are evident on the obverse face. A burin scar is present on the basal edge. Proximal lateral edge smoothing is present.

Plainview type fragment (Figure 2-C) - The material is pinkish-white Edwards Plateau flint. The total length is 23 mm. The maximum width is 24 mm located at the base. The maximum thickness is 7.8 mm. The weight is 3.2 grams. Existing workmanship is of high quality. Extensive basal thinning is evident on both faces. Heavy smoothing is present on the original basal edge.

Undescribed type (Figure 2-D) - The material is lavender-tan Edwards Plateau flint. The total length is 49 mm. The maximum width, located at midbody, is 21 mm. The maximum thickness is 6.8 mm. The weight is 7.7 grams. The tip has been possibly altered to serve as a graver. Heavy pressure flaking has produced a lenticular blade on this particular specimen. The blade exhibits a left-hand twist. While overall form is lanceolate, remnants of well-defined shouldering are still present. The stem has a left-hand bevel that appears to be a continuation of the blade twist. Stem edges are smoothed. The base is slightly bifurcate and is consistently thick to near the basal edge.

This undescribed type should not be confused with the Pandale or Nolan types. Manufacturing technique and association with the afore-mentioned Late Paleo types, lead us to speculate that this type may be an Agate Basin variant. Additional specimens sharing unifying attributes warrant definitive recognition of this unique type (Smith and Garrett, in preparation).

CONCLUSIONS

In summary, this is a multi-component site having geological features conducive to long-term occupation by early man. It should be noted that this campsite lies near the junction of two major canyons, which would have provided a convenient source of water and shelter. To the east of Isinglass Canyon lies a large plateau which represents the westernmost expanse of traversable terrain for many miles. The steep cliffs bordering this plateau very likely created a natural barrier for large herd animals. This feature would have provided an excellent opportunity to stampede herd animals over the edges of steep cliffs. This has yet to be proven; however, lithic debitage and artifacts have been observed on terraces below some of the steeper edges of the plateau, indicating

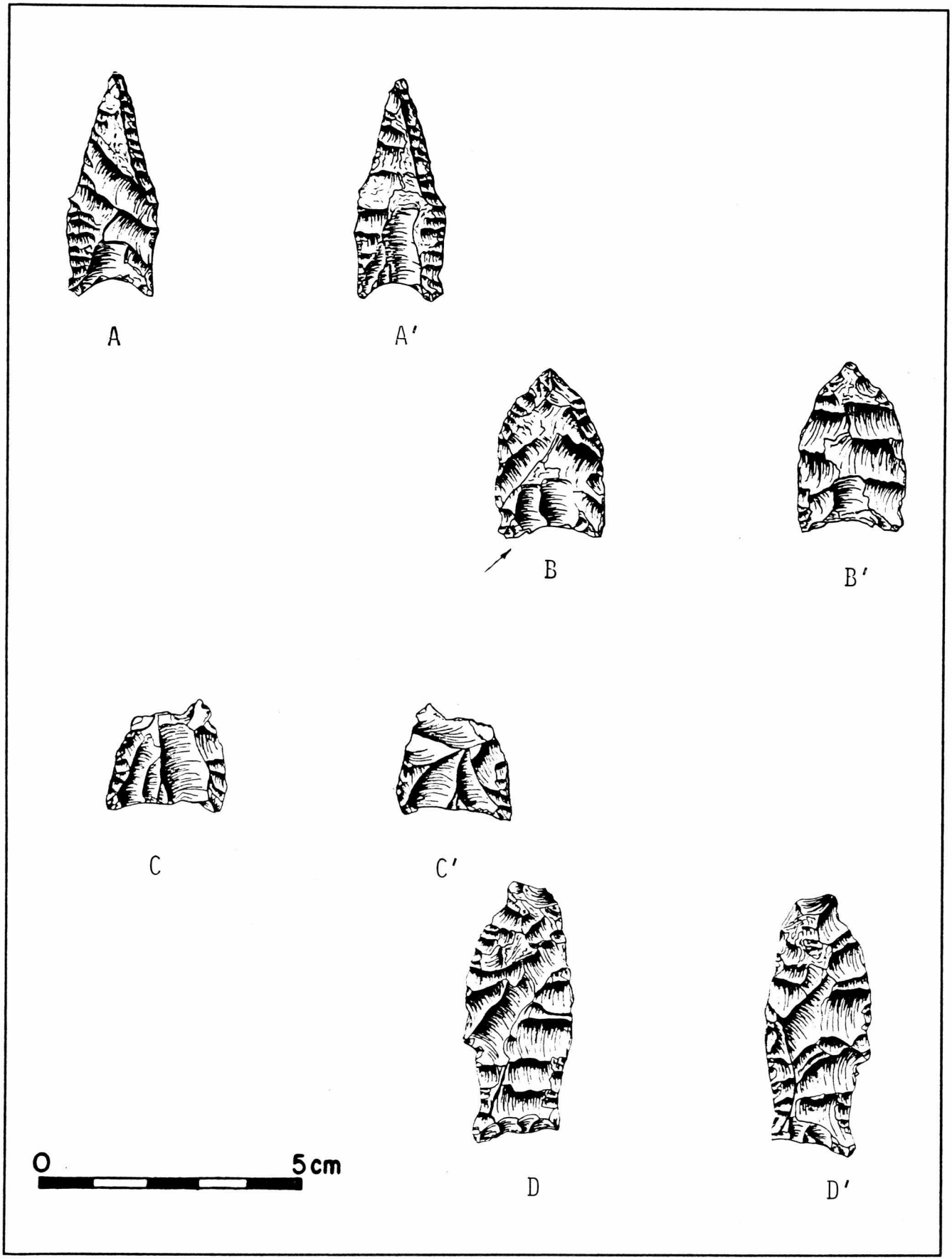

Figure 1. Obverse and reverse views of lithic artifacts from Terrell County. A, Plainview/Meserve type; B, Plainview type; C, Plainview type fragment; D, Undescribed type.

animal butchering activity, or merely positions in which to ambush small game in the lower canyon. Difficult and limited access to these terraces would tend to support the former theory. These features might lend credence for the presence of Paleo man in an area that has in the past failed to provide evidence of such ancient occupation.

ACKNOWLEDGEMENTS

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AUTHORS

LELAND C. BEMENT is a graduate student in the Department of Anthropology at the University of Texas at Austin (UTA). He also is a staff archaeologist with the Texas Archeological Research Laboratory (TARL), UTA. During the past ten years, Leland has been active in the archaeological community in Texas, working on numerous cultural resource management projects and conducting field research. He has a wife, Terry, and two children, Jason and Stephanie.

C. K. CHANDLER, current Secretary and also Documentation Chairman of STAA, is a retired railroad management official and engineering consultant with an insatiable interest in Texas archaeology. He is Past President of the Texas Archeological Society and a member of the Coastal Bend Archeological Society. C. K. was the 1985 Robert F. Heizer Award winner for his extensive work in south Texas archaeology (see Vol. 13, No. 1). Also, in 1985, he recorded more archaeological sites with the Texas Archeological Research Laboratory than any other individual. C. K. is a valued contributor of manuscripts to *La Tierra* and the *Bulletin of the Texas Archeological Society*, covering such varied subjects as metal points, rock art, and hearthfield sites in Terrell County. He has been honored by being named a TAS Fellow, and was also appointed as a steward for the Office of the State Archeologist. The Chandlers reside in northern San Antonio.

CLAY M. GARRETT is an Herpetologist for the Dallas Zoo. He is currently researching color polymorphism in tropical snakes, and studying the behavior and habitat utilization of new world pitvipers in Costa Rica. He is also an accomplished natural science illustrator having many published works; his most recent contribution being *The Venomous Reptiles of Latin America*, published by Cornel University Press. Clay's archaeological interest began several years ago, after finding lithic materials while on botanical collecting trips for the Chihuahuan Desert Research Institute. He is currently a member of the Dallas Archeological Society and the Southern Texas Archaeological Association.

RICHARD McREYNOLDS, *La Tierra*'s fine illustrator and coauthor, began his interest in Indian artifacts at an early age when following his mother and grandfather across the fields of the family farm in Massachusetts. He inherited his artistic talents from his mother. He finds the Pecos River area and South Texas in general the most exciting archaeological zones for study. Richard is a Civil Service employee at Kelly Air Force Base, and a family man and father of two grown daughters.

TIMOTHY D. SMITH is an avocational archaeologist whose family's 150-year span in northeast Texas helped to spark an interest in the area's history. Tim is a direct descendant of Daniel Montague, pioneer and surveyor for the Republic of Texas, and proprietor of an Indian trade store on the Preston Bend of the Red River (Montague County is named for him). As a teenager, Tim first stumbled onto, and later sought out, turn-of-the-century trash dumps and was fascinated by the volume of information they contained. In later years, while while collecting biological specimens in the Trans-Pecos region of Texas, Tim could not fail to notice the sheer volume of lithic debitage eroding out of the thin topsoil characteristic of the area. This led to an enduring interest in Texas prehistory. Tim's primary interests are: pre-archaic projectile point typology the origin and distribution of lithic materials, and relationships between Texas and Mississippi Valley people in the pre-archaic.

THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION

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

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