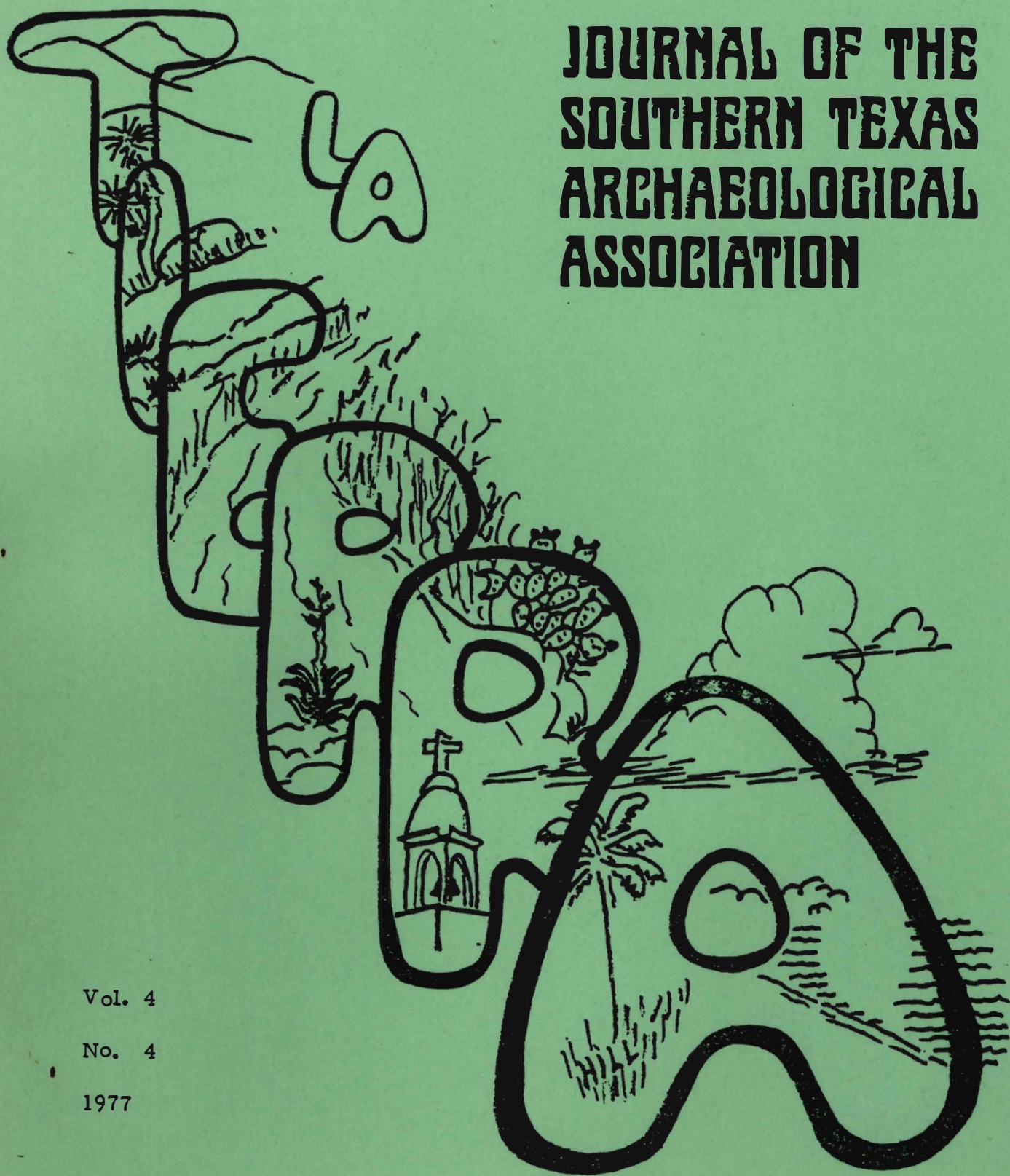


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Anne A. Fox
Journal Editor

FROM THE EDITOR	1
CONTRIBUTED PAPERS	
41 CM 52 - A SALVAGE SITE IN COMAL COUNTY, TEXAS (Jimmy L. Mitchell)	2
RESPONSE TO PATTERSON ON SOLLBERGER DISTRIBUTION (Joel Gunn and Royce Mahula)	10
A STONE OUTLINE FIGURE IN CENTRAL TEXAS (L. M. Green)	11
PRELIMINARY INVESTIGATIONS AT THE WOLF SITE, BLANCO COUNTY, TEXAS (Lynn Highley and Dan Lengefeld)	16
THE LIFT-OUT TECHNIQUE: A PREHISTORIC LIVING FLOOR - PHASE II (Harvey Smith, Jr.)	20

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FROM THE EDITOR

This edition of the Journal contains an interesting cross section of the varied interests of STAA members, as well as an indication of the extent of the area with which they are concerned.

It has been the policy of this Editor to include as much variety as possible both in subject matter and in the geographical areas covered. We are interested observers of the discussion about the Sollberger Distribution, and happy to provide a forum for such debate. Although this issue tends more toward Central and West Texas, we have had ample opportunity in past issues to read about sites in South Texas as well.

We have tried to strike a balance between prehistoric and historic site reports, and to include as many student and amateur contributions as we can obtain. In other words, we have tried to provide opportunity for the training and education of our members as well as for their entertainment.

With the next volume we will welcome a new Editor. We wish him-or-her success and pleasure in the job, and ask that you keep the manuscripts coming in.

Anne Fox

41 CM 52 - A SALVAGE SITE IN COMAL COUNTY, TEXAS

Jimmy L. Mitchell

Introduction

Comal County is located between San Antonio and Austin in the transition zone between the Edwards Plateau and the Coastal Plains. It represents the northern fringe of our Southern Texas region and archaeologically is very similar to Bexar and other counties along the Balcones escarpment.

Very few formal reports have been published concerning Comal County sites; the best known is the work of Johnson, Suhm, and Tunnell (1961) who reported on the Wunderlich, Footbridge, and Oblate sites which were salvaged prior to the completion of Canyon Reservoir. The Johnson, Suhm, and Tunnell report was one of the 20 bibliographic references concerning Comal County cited by Hester, Bass, and Kelly (1975); many of the remaining entries were newspaper reports or manuscripts on file at the Texas Archeological Research Laboratory (TARL) in Austin. As of late 1974, only 54 archaeological sites were documented by TARL for the county (Fox and Hester 1975); this number increased by 89 by late 1975 primarily as a result of contract surveys (Hester, Bass, and Kelly 1975; Jaquier 1977).

Even with this recent surge of information, the discovery and documentation of sites in this area remains a critical need. As Fox and Hester (1975:7) have noted, the area along the Guadalupe south of Canyon Reservoir undoubtedly contains many additional prehistoric and historic sites worthy of recording and study. This report documents the discovery and analysis of one such site.

The Discovery

In July, 1972, Dr. John Winsch (a physician now practicing in Central Ohio) and his wife were driving through Comal County to observe the flood damage done by the rampaging Guadalupe River earlier that year. At a point about midway between Canyon Lake and New Braunfels, they stopped on the river road to examine the devastated area. The fences in the area had been demolished by the flood and Dr. Winsch was able to walk upstream along a minor creek to a clearing where a bulldozer had scraped away the debris around a small pond. A number of artifacts were visible in the newly exposed soil. Dr. Winsch made a quick survey of the pond margins and then collected all of the exposed artifacts before returning to his car for the trip back to San Antonio.

Subsequently, the site was reported to the TARL and was recorded as 41 CM 52. A site name has not yet been selected; the exact location and description of the site is on file at the laboratory. During a second visit to the site area, accompanied by the author, Dr. Winsch found that a fenceline now lay between the pond and the highway. A confrontation with the ranch operator at the fenceline revealed that the rancher did not believe that there were any prehistoric Indian sites in the area and that he had no interest in having anyone look at them if there were any. His hostility suggested that no further survey in his area would be welcome or tolerated. We retreated.

Thus, the extent of our knowledge of this site is limited to the very brief look which Dr. Winsch had of it and to study of the artifacts which he recovered. His brief intrusion onto this private property (unmarked by fences as a result of the flood) represents a very quick archaeological salvage operation. It resulted in documentation of a new site in Comal County and, eventually, in this report. The artifacts recovered were loaned for analysis and, upon publication of this report, will be turned over to the TARL as property of the people of Texas.

The Artifacts

Some of the specimens salvaged from the site are shown in the accompanying illustration. They include both lithic and bone materials.

Projectile points included in the collection are two Frio points (Fig. 1, O-P), one with about one-third of its blade missing; one Darl-like point (Fig. 1, R); and one fragmentary corner-notched specimen which may be a Marcos point (Fig. 1, M) or a related variant type. Several of the other fragments in the illustration are undoubtedly the remains of projectile points but are not sufficiently complete to permit classification (Fig. 1, Q and S). Measurement data for all specimens recovered from the site is given in Table 1.

Several knives or knife fragments were also recovered. The most complete specimen (not illustrated) is a leaf-shaped form often called a Plains Knife. One end is slightly smaller in outline than the other half of the artifact which suggests that the smaller end has been reworked. This may be evidence of resharpening so that the knife could be reused. Sollberger (1971) has suggested that such resharpening of leaf-shaped knives resulted in the alternately beveled knives commonly found on Late Prehistoric sites of the Southern Plains and he has documented this type of artifact from a number of sites in Central and Northern Texas.

The other knife-like artifacts in this collection (Fig. 1, C, D, K, L) are all within the range of the ovate-to-beveled forms which Sollberger

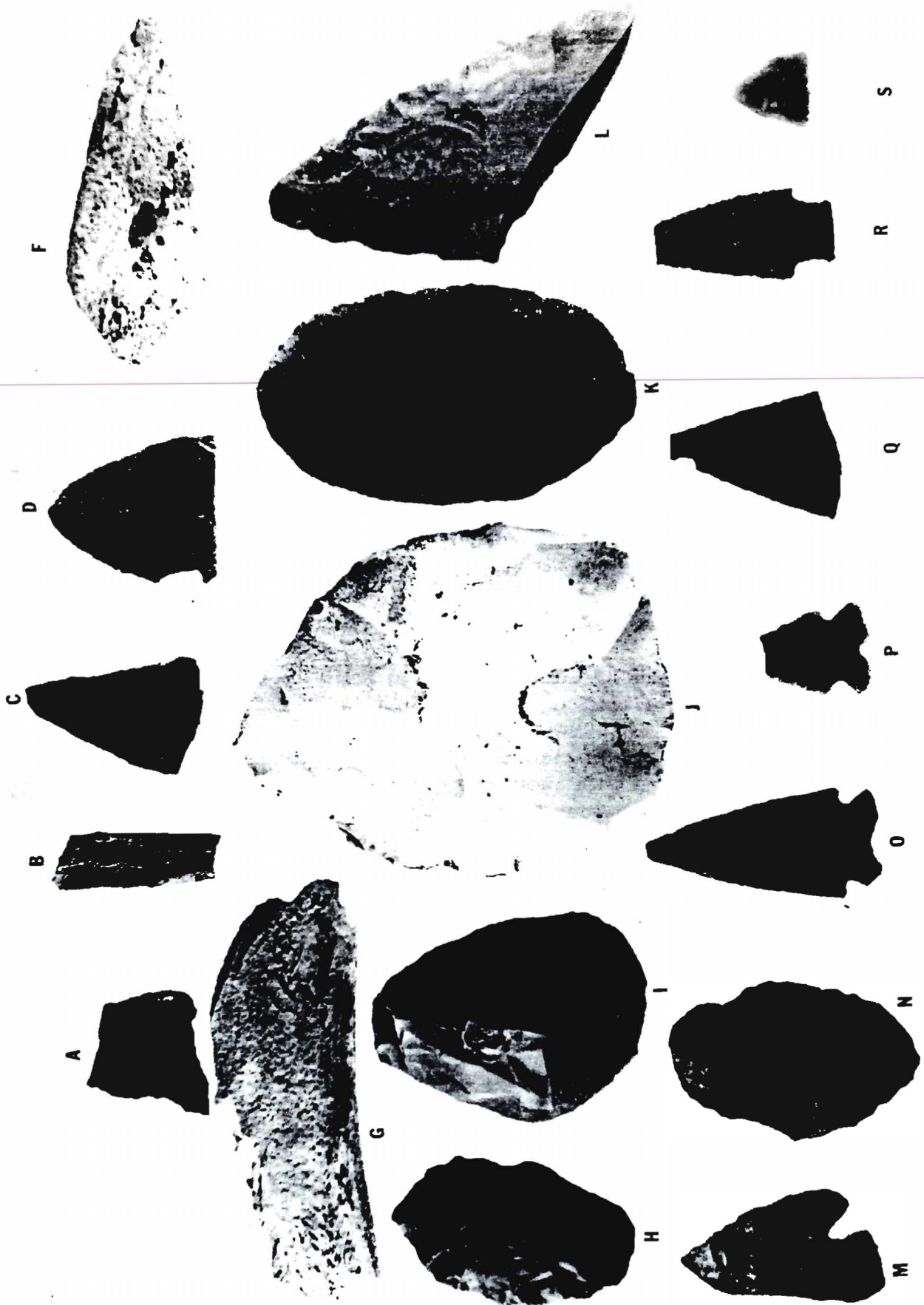


Figure 1. Artifacts from 41 CM 52. B, F, and G - Bone Fragments; M, O-S - Projectile Points and Fragments; C, K, and L - Knife and Knife Fragments; I - Unifacial Scraper.

has postulated as the normal spectrum produced by resharpening. Such reworking is perhaps most evident on the large fragment of a biface shown as Fig. 1, L. Beveling is most apparent on the specimen shown as Fig. 1, C.

Most of the remaining artifacts are bifaces which could be scrapers, choppers, or some other type of tool. The artifact with a crystal inclusion (Fig. 1, I) is a unifacial scraper. Its reverse face is a single fracture plane with a force bulb evident at the smaller end; thus it would appear to be a scraper made on a single flake. Its leading edge is finely worked with minute pressure flaking which resulted in a very sharp edge.

Also included in the collection are three pieces of bone material. The smallest of these (Fig. 1, B) is grooved on one surface, and this feature is so regular as to suggest possible human workmanship. However, a close examination of this piece by Dr. T. R. Hester (Director, Center for Archaeological Research, The University of Texas at San Antonio) revealed that it was a natural groove. The other bone pieces (Fig. 1, F, G) are so worn and fragmentary that no firm identification could be made. All of the bone material appears partially fossilized which suggests that it is not a modern intrusion into the artifact assemblage.

A number of pieces of fire-reddened flint were also recovered. This group of fractured pieces appear to be the remnants of fire-cracked cobbles. None of the fractures appears to have been made by percussion. Several of the projectile points also show evidence of exposure to heat. The Darl-like point (Fig. 1, R) has a visible heat bubble scar on its surface, which suggests that it was exposed to great heat sometime after its manufacture.

Possible Dating

The presence of Frio points with a possible Marcos type would suggest a Late Archaic occupation at this site. Johnson, Suhm, and Tunnell (1962) reported Marcos, Frio, and other points representing the Late Archaic at the Oblate Rockshelter and the Wunderlich sites at Canyon Reservoir, approximately 10 miles northwest of 41 CM 52. These authors also noted Darl points at some of the Canyon Reservoir sites which they believed to be characteristic (along with Frio and Ensor) of the very Late Archaic or Transitional (to Late Prehistoric) periods.

The fact that all three point types identified at 41 CM 52 are related to the Late Archaic period and that point types diagnostic of other periods are not present tends to suggest that the site represents a single occupation zone. However, the leaf-shaped knife and its related

Description	Ref. in Fig. 1	Length*	Maximum Width	Base Width	Thick- ness	Weight*
Large Frio	O	(56)*	27	(24)	6	(9)
Small Frio	P	(26)	24	24	5	(3)
Marcos	M	(46)	(25)	(17)	7	(7.5)
Darl	R	(43)	22	(15)	6	(6)
Plains Knife		89	40	■	7	27
Knife fragment	L	■			12	(54)
Large White Biface	J	104	85		25	219
Ovate Biface	K	90	53		19	81
Unifacial Scraper	I	68	51		16	54
Knife fragment	C				9	(11)
Point fragment	Q				5	(6.5)
Small Biface fragment	D				7	(15)
Small Biface	N	66	39		17	27
Scraper	H	60	36		29	34
Point tip	S				5	2)
Fragment	A				6	7.5)
Grooved bone	B	40				2.5
Bone	I	81				29
Bone	G	109				37
Reddened rock					20	48
Reddened rock					12	22
Reddened rock					18	17
Reddened flake					3	3
Flake					5	2.5

* All measurements in mm except weight which are in grams. Data given in parentheses are partial, based on incomplete specimens.

Table 1. Metric Data for Artifacts from 41 CM 52.

specimens imply alternately beveled knives which some researchers consider to be more diagnostic of the Late Prehistoric (or Neo-American) period. Sollberger (1971) has noted that such knives are associated with bison hunting in the Late Prehistoric and believes that they were developed only after the introduction of the bow and arrow to the Texas portions of the Southern Plains.

Alternately beveled, ovoid, and leaf-shaped knives were among the types recovered at the Oblate Rockshelter; thus the specimens at 41 CM 52 are by no means unique for this area. The alternately beveled knives at Oblate were found in Zone III near the surface, as were some of the Frio, Ensor and other dart points. The provenience of two leaf-shaped knives was uncertain.

Recently, Frank Weir (1976) has proposed a different periodization for the Central Texas Archaic. He hypothesized a San Marcos Phase between 2800 and 1800 B.P. which included both Marcos and Frio points as diagnostics. This phase included a decrease in population in Central Texas and a trend toward bison hunting. A Twin Sisters Phase, dating between 2000 and 700 B.P. followed; its characteristic artifacts included Frio, Darl, and other small dart point forms. Weir notes that the Twin Sisters Phase represented the last of the Archaic manifestations and possibly overlapped with the Late Prehistoric. Weir's San Marcos Phase would equate with the "Late Archaic" of Johnson, Suhm, and Tunnell (1962), and his Twin Sisters Phase apparently is the equivalent of their "Transitional" period from the Archaic to the Late Prehistoric.

Prewitt (1976) has more closely dated these phases, based in part on the radiocarbon dates from the Loeve-Fox Site. He dates the Twin Sisters Phase (Transitional) as between approximately A.D. 200 and 700, and the San Marcos Phase (Late Archaic) between 600 B.C. and A.D. 200.

Interpretation

If this collection represents a single occupational level, then it may be indicative of the overlap period between the Twin Sisters and the San Marcos phases. Thus, it may date approximately A.D. 200. If the site is multicomponent, then it would suggest occupations during both of these phases and perhaps even into the Late Prehistoric (based on the possibility of alternately beveled knives). Since any stratigraphy at the site was destroyed by the bulldozer being used to remove debris left by the flood, no final conclusion can be drawn.

An interesting possible alternative hypothesis can be generated, however, based on this discrete co-occurrence of the knives and the Late Archaic-Transitional point types. Since these knives (which

Sollberger postulates are associated with bison hunting) occur here with Late Archaic points at a time (the San Marcos phase) which Weir postulates as having included a trend toward bison hunting, it may well be a hint that such knife forms developed much earlier than has previously been recognized. This possibility has some interesting implications in terms of the cultural dynamics of the Southern Plains.

The occurrence of these types of knives, possibly associated with Late Archaic and Austin Focus materials at the Oblate Rockshelter, would tend to give some strength to this new hypothesis. Unfortunately, the exact associations of many of the Oblate Rockshelter materials are not very clear; a more discrete site or occupation level with specific association between alternately beveled knives and Late Archaic or Transitional materials will be needed for a clear proof of this suggestion.

Another possibility is that the point types here considered diagnostic of the Late Archaic may have survived much later than is recognized in the Weir chronology. We know that in some areas of the state the larger dart point forms were used into Late Prehistoric times (Mitchell 1975). While this possible explanation may be valid, the absence of any arrowpoints or other Late Prehistoric diagnostic materials (such as pottery) at 41 CM 52 makes it highly unlikely.

Comment and Acknowledgments

The present report summarizes information obtained by an out-of-state physician during a single visit to a newly exposed site made temporarily accessible to the public by a record-setting flood of the Guadalupe River. The fact that this site was subsequently recorded with TARL, is being reported, and that the artifacts will be deposited with TARL for future archaeological use, is an interesting comment on the possibilities of salvage archaeology. Even this small amount of information can be useful in furthering our understanding of prehistoric Central and Southern Texas. It is also a very positive tribute to the keen archaeological interest and professional spirit of Dr. John Winsch.

The work of Charles Stout of Fairborn, Ohio, in photographing these materials deserves a special thanks. Ian R. Mitchell compiled the data which is presented in Table 1.

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RESPONSE TO PATTERSON ON SOLLBERGER DISTRIBUTION

Joel Gunn and Royce Mahula

Patterson (1977) has provided several comments on our article in which we analyzed the debris from a biface knapped by J. B. Sollberger. Of particular interest is his figure of 20% loss of data by using only flakes with intact platforms and eliminating collapsed platforms. While the use of flakes with collapsed platforms requires adjustments in our research strategy, the possibility of obtaining a more complete analysis may warrant a reexamination of our data or at least consideration in future research.

Similarly, Patterson's suggestion that flakes which are products of simultaneous propagation are small and the effect they have on distributions can be eliminated by excluding small flakes of a certain size is parsimonious and therefore preferable to our transformation approach. As Patterson himself notes, however, many of the smaller flakes are platform trimming flakes and are a direct result of the knapper's bifacing strategy rather than products of accident. It seems to us, therefore, that our method of transforming the whole distribution rather than eliminating part of it is the more desirable approach. The intentional and fortuitous small flakes can only be distinguished in replicative experiments, not in field data.

With regard to Patterson's criticism of our use of normal distributions, we feel that he has misapplied the results of replicative experimentation to the analysis of field data. Most modern knappers do practice bifacing as a continuous process with no break from beginning to end. Field data, however, we feel is a different matter. The modern knapper can load a hundred pounds of chert into his car, carry it home and at his leisure practice bifacing as a continuous process. The prehistoric individual, on the other hand, was faced with a different reality, namely, no car. As a consequence, the bifacing process was accomplished in part at the quarry to lighten the load and in part at the task site, once the knapper was sure of the tool he needed from the chert. Thirdly, tools were maintained, resharpened and reshaped. This suggests a staged, rather than a continuous process, quite possibly with modal ideas as to what flakes should look like at each stage. Such a theory is strongly supported by field data, as there are innumerable comparisons in the literature showing the difference between quarry and occupation site debris.

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A STONE OUTLINE FIGURE IN CENTRAL TEXAS

L. M. Green

The site in question is located in the northeast part of McCulloch County, about 17 miles northeast of Brady and seven miles north of Rochelle, on a part of the middle Colorado drainage system. It is within the southern part of the Western Cross Timbers at an elevation of approximately 2,000 feet above sea level. Biota of the area are typical of the Balconian Province within which the site lies.

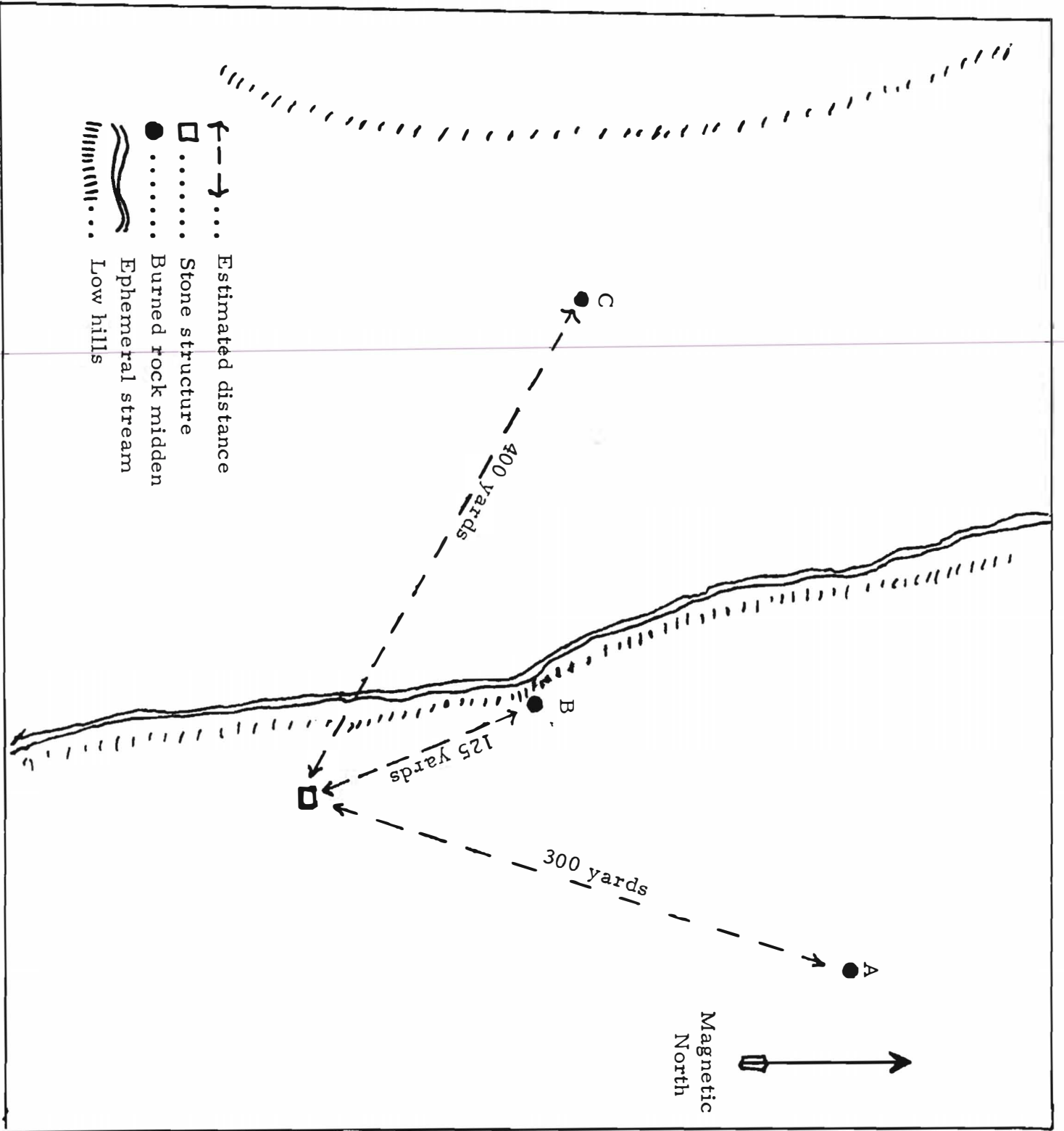
The pasture in which the site is situated has been cleared by a bulldozer, except along the stream, but vegetation nearby includes mesquite, varieties of oak (post oak, blackjack, live oak) and various brushes in the uplands with the usual elm and other varieties of trees along the stream. Soils are mixed, primarily sandy loam with dark alluvium on the stream terraces. Sandstone is plentiful on the farm on which the site is located, and the landowner reports that there are also numerous outcrops of hard, limestone-like rocks and cobbles of chert on the place.

Rainfall in the area averages 25.1 inches annually and the growing season is around 226 days. The terrain around the site is rather hilly and gently rolling, with low hills which have brushy cover. Caliche outcrops are visible along the roads and farm roads are topped with caliche.

The structure, which term is used in want of a better one, is situated on a comparatively level spot on a hill that slopes toward the creek (Figures 1 and 2). It is made up of a series of three squares and two concentric circles, formed by setting flat stones on edge in the ground. Around the inner figures, at about a distance of two feet, is another line of stones which entirely encloses them except for a two-foot-wide lane projecting westward. A similar lane projecting to the north is closed by an arc of stone slabs (Fig. 3). Pertinent measurements are given in Fig. 4.

The stones used in construction appear to be primarily sandstone, which is abundant in the vicinity. These stones are "earth-colored," being from brown to various shades of tan or reddish brown. All are rather small, thin slabs, from one to two inches thick, six to fourteen inches long, and of varying heights. They protrude from bare visibility to several inches above ground surface. The lines are surprisingly straight and checking with a compass showed them to be oriented to the four cardinal points. The circles are quite accurately round.

Fig. 1. Sketch map of site and immediate environs. (not to scale)



In the vicinity are three burned rock middens (Fig. 1). Midden A, composed of limestone chunks, is in a small sandy field directly west of the owner's house. It measures probably 20 x 25 feet, oval in shape, and rises some 18 inches above ground level, lensing outward. Plowing has probably dispersed and lowered it somewhat. The landowner said he had found a number of broken points around this midden, but few chert fragments were in evidence. It is about 300 yards from the site of the stone structure.

Midden B is located on a low hill right near the creek, about 125 yards northwest of the stone structure. It is a bit larger than Midden A, similar in shape, and its apex is some two feet or more above ground level. This midden is composed mainly of burned sandstone chunks.

Midden C is situated across the creek from the structure and some 400 yards to the northwest. It, too, is in a field, and probably above flood level. This midden appears to be similar to the others, but was not examined.

Few chert flakes were seen anywhere in the vicinity. The middens are all above flood level. A few mussel shell fragments were present around them. While the stream is presently ephemeral, it was probably perennial in earlier times.

In sum, this is a very interesting and baffling structure, here in the middle of Texas. I am inclined to believe it is aboriginal, perhaps done by one of the Plains tribes in historic times for some sort of ritualistic ceremony. I can not see the always-in-a-hurry, materialistic Anglo settlers nor the easy-going, gold hunting Spaniards taking the time, pains and patience necessary to build a plaything like this.

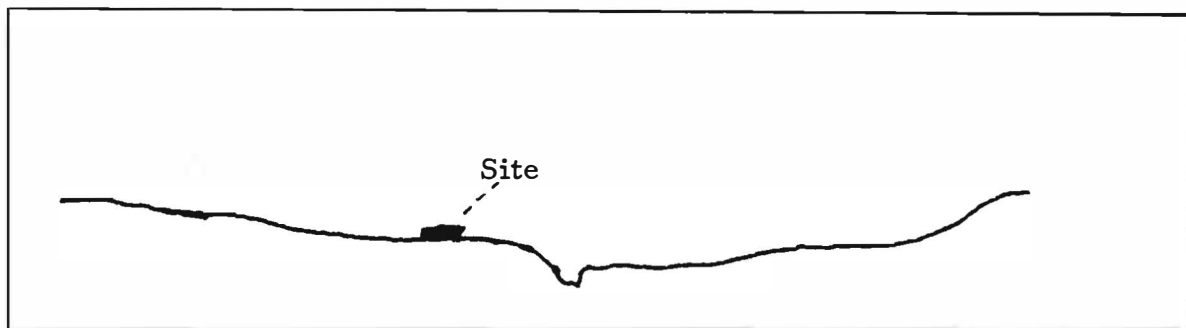
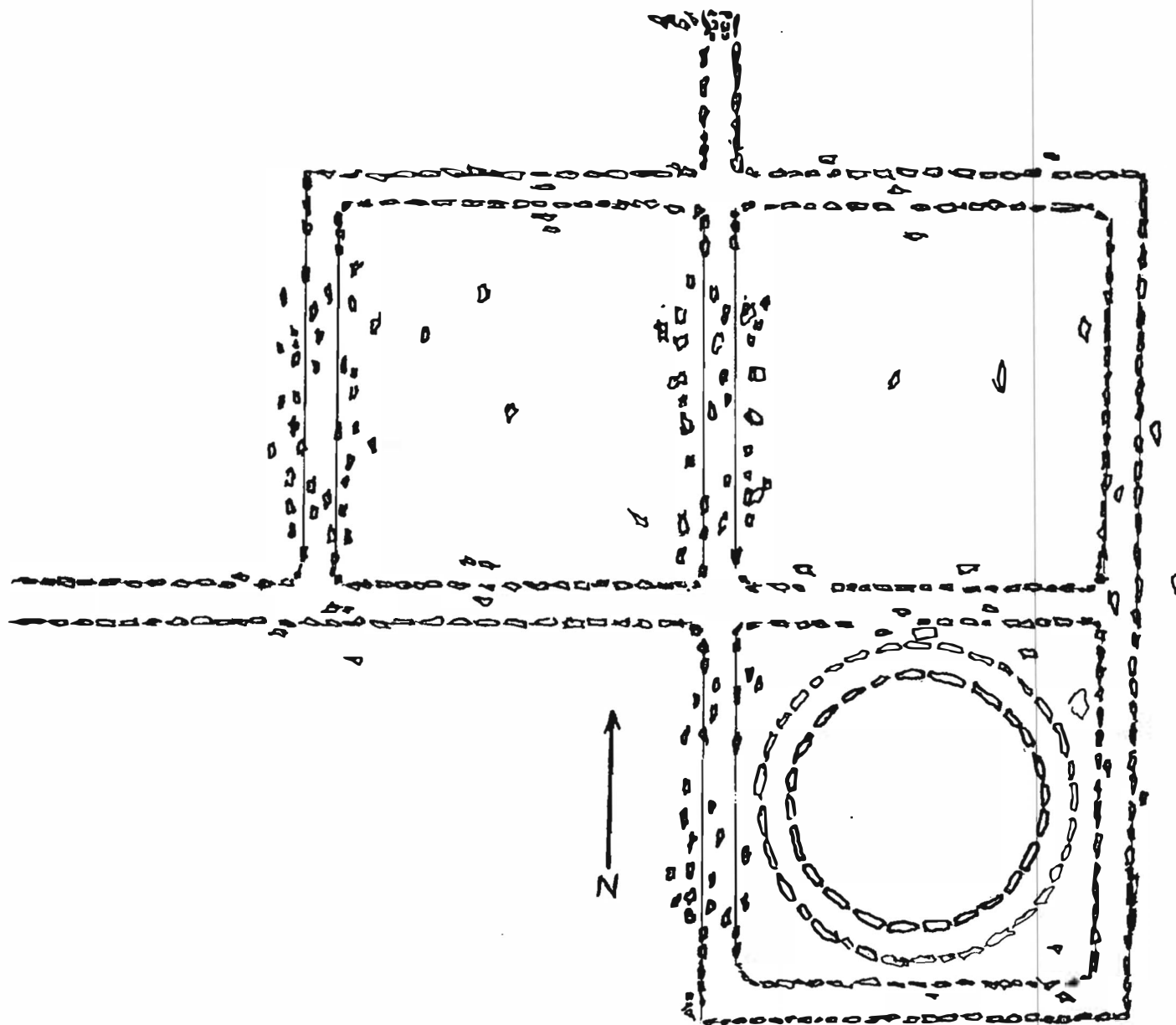


Fig. 2. Idealized east-west profile.

Fig. 3. Diagram of structure at present, showing method of placing stones and present condition, with many stones scattered and lying about. Bulldozer activity, and grazing livestock apparently account for the displacement of these scattered stones.



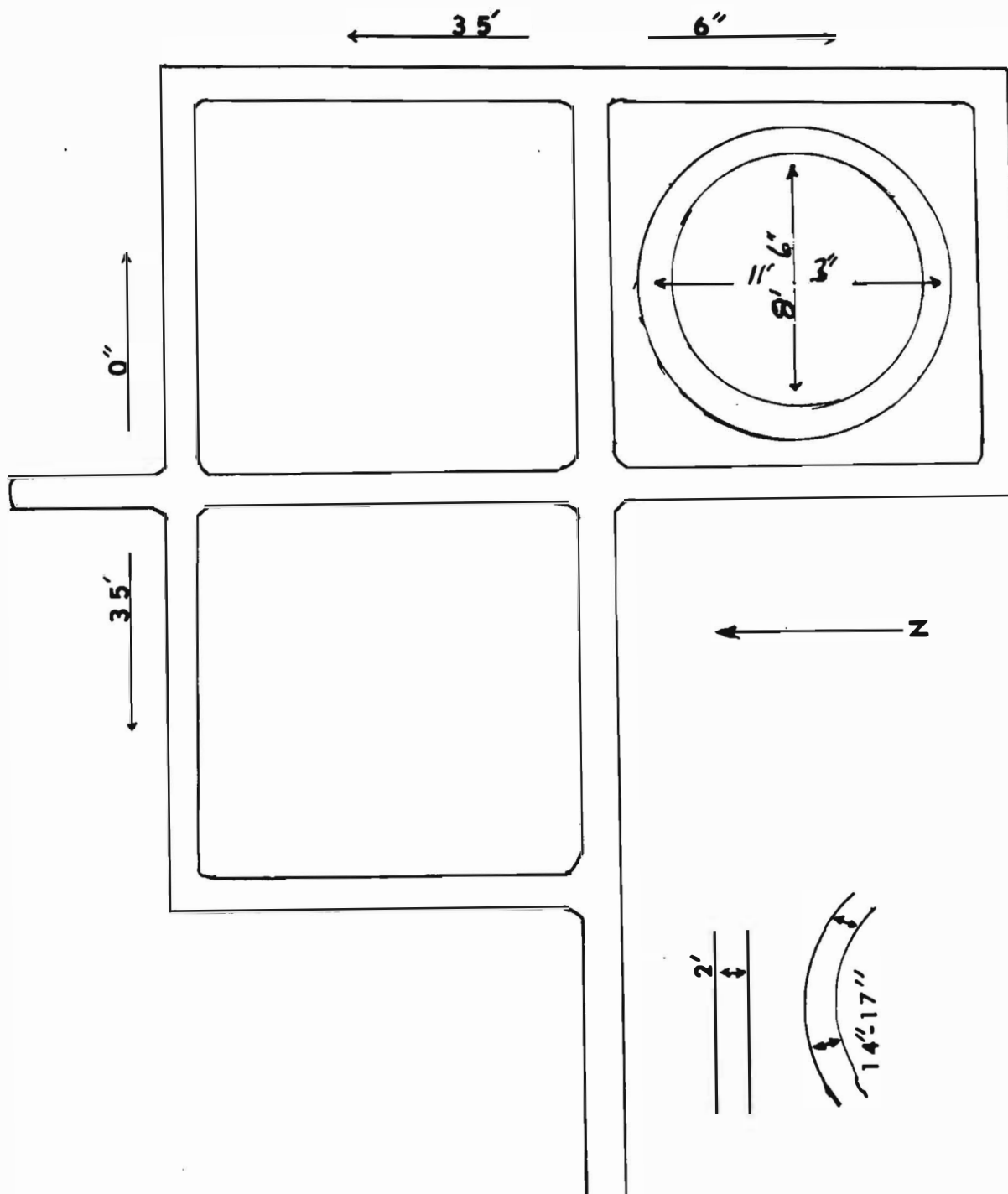


Fig. 4. Linear diagram, approximating the apparent original layout of the geometric figures forming the stone slab structure in McCulloch County. (Scale: approx. 1" = 5')

PRELIMINARY INVESTIGATIONS AT THE WOLF SITE, BLANCO COUNTY, TEXAS

Lynn Highley and Dan Lengefeld

Brief Investigations at the Wolf Site (41 BC 73), consisting of surface collections and one test pit, have yielded a variety of artifacts from a rockshelter and the surrounding area. Located on the south bank of the Pedernales River near Johnson City, the Wolf Site consists of a rockshelter facing north towards the Pedernales River with a burned rock midden approximately 200 m to the east. Lithics are scattered 200 m east and west of the rockshelter. The rockshelter is approximately 75 m from the Pedernales River.

Surface Collections

In May, 1975, a general surface collection was made along a 200 m stretch west of the rockshelter. Artifacts included:

- 1 arrow point - medial fragment
- 3 ovate unifacial scrapers (Fig. 1 a-c)
- 1 perforator (Fig. 1 d)
- 2 biface fragments
- 8 trimmed flakes (Fig. 1 e)
- 1 core
- 1 hammerstone

In September, 1977, the area 200 m east of the rockshelter was bulldozed and a burned rock midden was exposed and apparently destroyed. Found among the scattered burned rock were:

- 1 biface medial fragment, patinated
- 1 side and end scraper (Fig. 1 f)
- 1 core chopper (Fig. 1 g)
- 1 trimmed flake (Fig. 1 h)
- 1 crude biface
- numerous flakes

The owners of the property have also found one Nolan point, an Ensor point, and one triangular arrowpoint in the area in front of the rockshelter (Fig. 2 a-c).

Excavations

In May, 1976, a shovel test pit was dug in the rockshelter. Directly below the surface a Perdiz point (Fig. 2 d) was uncovered, as well as numerous flakes and flake blades, several of which are trimmed. One bone awl fragment was recovered (Fig. 2 e). Several bone fragments found were identified as small mammal remains.

In October, 1976, a one meter test pit was partially excavated. A Perdiz fragment, unifacially flaked (Fig. 2 f), was recovered in Level 1 (0-15 cm). Other items included:

- 42 secondary flakes
- 54 interior flakes
- 12 flake blades and flake blade fragments (Fig. 2 g,h)
- 1 core fragment
- 3 bone fragments
- 1 Mesodon sp. snail
- 2 pecan fragments

Three of the flakes are trimmed. Two trimmed flake blade fragments fit together (Fig. 2 i).

Level 2 (15-25 cm) was excavated in the southwest quadrant only. Recovered were:

- 6 secondary flakes
- 20 interior flakes
- 3 flake blades
- 6 bone fragments (one coyote or wolf fang)
- 1 charcoal sample

One secondary flake was alternately beveled along the lateral edges to form a point (Fig. 2 j). The point has been broken.

Conclusion

Many of the artifacts present at the Wolf Site are similar to the artifact assemblage present at the Finis Frost Site (Green & Hester 1973) and are attributed to the Late Prehistoric Toyah phase of Central Texas.

Other than the Perdiz and triangular arrowpoints, the unifacial scrapers and flake blades appear to be indicative of the Toyah phase (ibid). Further work is needed to determine the depth of the cultural remains. The nearby burned rock midden would date within the Archaic period. Further investigations are also needed here.

The Wolf Site probably represents a seasonal camp site for hunters and gatherers. Deer and other mammals are abundant in the area. The Pedernales River would provide riverine resources. Pecan trees near the rockshelter would yield abundant pecans in the fall.

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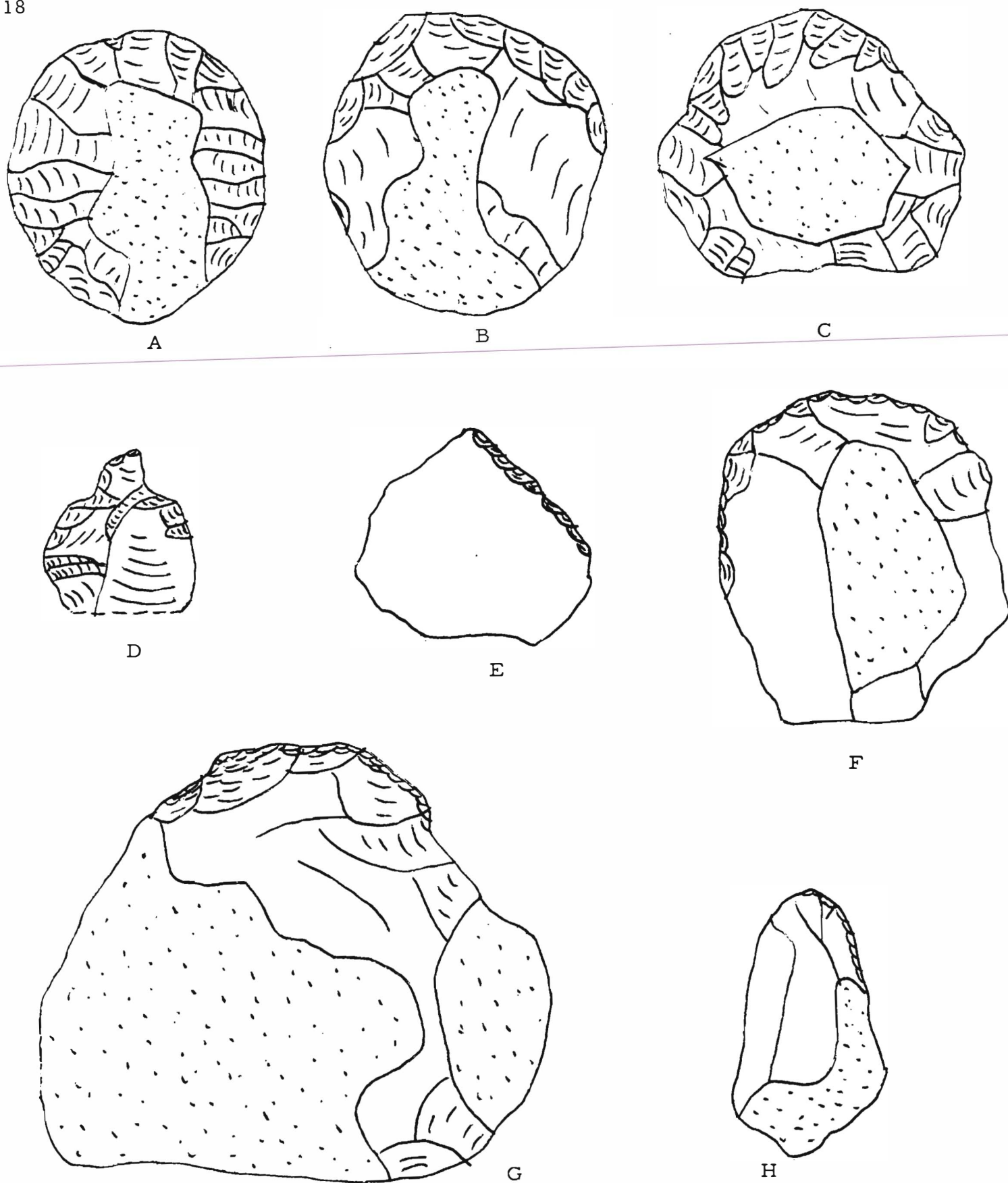


Fig. 1. Surface artifacts from Wolf Site. A-C: ovate unifacial scrapers; D: perforator; E: trimmed flake; F: side and end scraper; G: core chopper; H: trimmed flake.

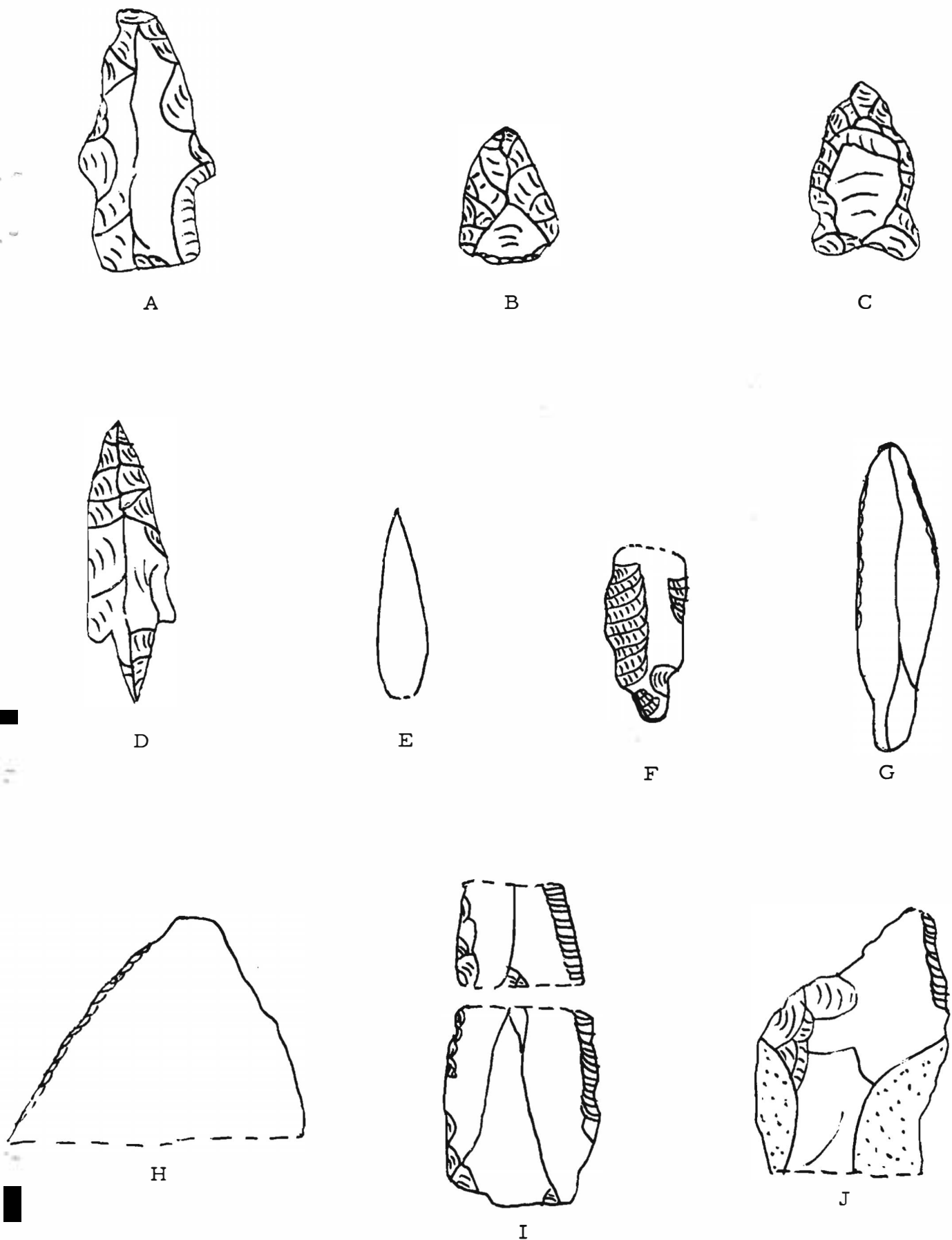


Fig. 2. Artifacts from the Wolf Site. A: Nolan; B: triangular arrowpoint; C: Ensor; D: Perdiz; E: bone awl; F: Perdiz fragment; G-H: trimmed flakes; I: trimmed blades; J: trimmed flake.

THE LIFT-OUT TECHNIQUE A PREHISTORIC LIVING FLOOR

PHASE II

Harvey Smith, Jr.

A further opportunity to test the "Lift-out" technique of field sampling was afforded the author during the last days of the 1976 Baker Cave project (Hester 1977; Wellemeyer 1976). This was the third project conducted in this large rockshelter located northwest of Del Rio near the Devil's River and adjacent to Phillip's Creek (Word 1970). A joint venture with the Center for Archaeological Research, The University of Texas at San Antonio, and Earthwatch, the program was under the co-directorship of Dr. Thomas R. Hester and Dr. Robert F. Heiser.

Baker Cave is noted for its well-defined occupational strata which are particularly well preserved in the upper meter of deposit. A series of discrete occupational levels are created by sterile roof-spalling which separates each fiber-bearing occupation strata.

The removal of a 50 x 50 cm vertical section was accomplished by the previously developed Lift-out technique where each occupational level is removed intact for later analysis and study in the laboratory (Smith and McGuire 1976). The vertical section and its analysis will provide advance information for more extensive investigation of these upper occupation zones in the future.

Eight discrete zones or levels were found to exist from the top of the deposition down to the wide "bench" which had been created by previous excavation (Greer 1968). At the level of the "bench" the vertical test section was related to the succeeding lower occupation levels which we had just completed excavating down to a bottom sterile zone. The combination of these two groups gave us a continuous stratigraphic record of the total depth of occupational deposition for this area of the shelter.

Laboratory analysis has now been initiated on the Lift-out samples, and separation of the basic items by group has been completed. Quantification and separation by species of such botanical items as leaves, seeds, nuts, sticks, cut and/or chewed sections of lechuguilla and sotol, prickly pear skins, and various grass fibers is continuing. Analysis of bones and fish scales is also planned.

Very tentative cultural and ecological implications could be summed up as follows from the information obtained at this point:

- A. Variable, intermittent occupation of Baker Cave by early humans is implied rather than a seasonal occupation. The depth of sterile roof-spalling was uniformly of powder consistency, and various strata ranged in depth from 1-19 cm in irregular sequence. This variable, extensive amount of roof-spalling indicates considerable periods of time without human occupation and with no uniform pattern to the periods of absence.

Equally irregular thicknesses of fibrous occupation debris imply variable lengths of occupation within the shelter.

- B. Fibrous occupation strata are not the result of intentionally placed matting for the occupants' comfort, but rather are the result of discarding, in place, large quantities of cut and chewed sotol and lechuguilla--as high as 80% of total strata content.
- C. Lechuguilla and sotol appear to be the primary vegetal diet. The leaves were cooked to a very dark brown color and a distinct preference for the "heart" of the plant was shown. Sharp, clean cuts were made with flint tools to obtain pieces of desired size. Large groups of tightly bunched leaves imply that the whole plant "heart" was cooked intact.
- D. Sotol leaves appeared to be a favored material for woven matting. Spiny edges were stripped off for ease of handling and to control width of woven strips.
- E. The presence of an abundance of fibrous materials both woven, twisted and knotted is typical of numerous trans-Pecos rockshelters previously excavated (Martin 1933; Epstein 1960; Kelly and Smith 1963; Ross 1965; Dibble and Prewitt 1967; Collins 1969; Word and Douglas 1970; Hester 1977; and Wellemeyer 1976).
- F. The early rockshelter occupants might be described as opportunists, as they took every advantage of local materials to make numerous artifacts. Sotol served as food and as raw material for woven matting and baskets and as easily obtained tie strings for various bundles of sotol leaves. Hollow reeds from nearby riverbanks were preferred for arrow and dart shafts and as containers for wooden points and seeds (Smith 1968; Martin 1933). Prickly pear leaf "skins" were utilized as wrappers or early forms of "baggies" for packaging small amounts of seeds, beans and nuts (Word and Douglas 1970; Martin 1933).

Conclusion

The "Lift-out" sampling technique has proven to be productive as a preliminary analysis procedure in the typical dry rockshelter deposits. The Baker Cave upper deposits are particularly well suited to this procedure because of the densely packed, discrete occupation strata of fibrous material.

Quantitative as well as qualitative analysis of the separated classes of items, will provide much additional cultural information on the early occupants, their habits and responses to their environment. Horizontal studies, possible with larger portions of the remaining deposits, will provide distributional information and activity patterns not obtainable with the small, initial vertical sample.

However, this initial vertical sample has provided a view of some of the cultural activities of these early cave dwellers, and their resourcefulness in living in a harsh environment. We see them as hard-working hunters and gatherers, alert to opportunities and flexible in response to environmental changes.

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