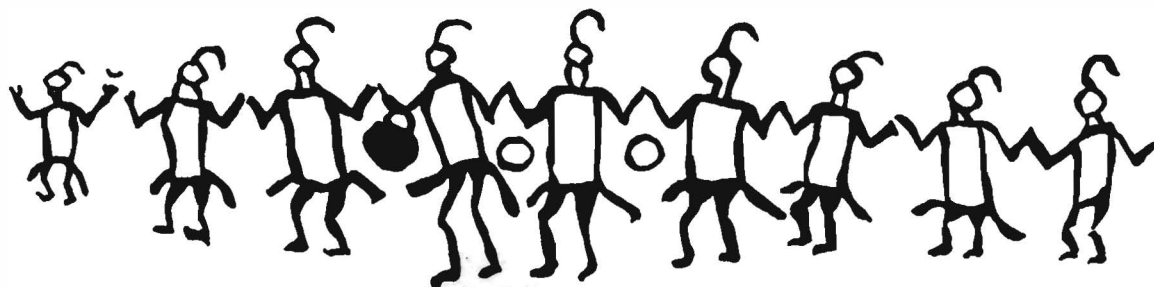


# LA TIERRA



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January 1986

Volume 13, Number 1

LA TIERRA

Quarterly Journal of the Southern Texas Archaeological Association

Volume 13, Number 1  
January, 1986

Jimmy L. Mitchell  
Editor

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Cover Illustration: Rock Art Images from the Meyers Springs Site (41 TE 9), a rockshelter in Terrell County, Texas. Line drawing by David G. Robinson of the Texas Archeological Research Laboratory staff (courtesy of TARL).

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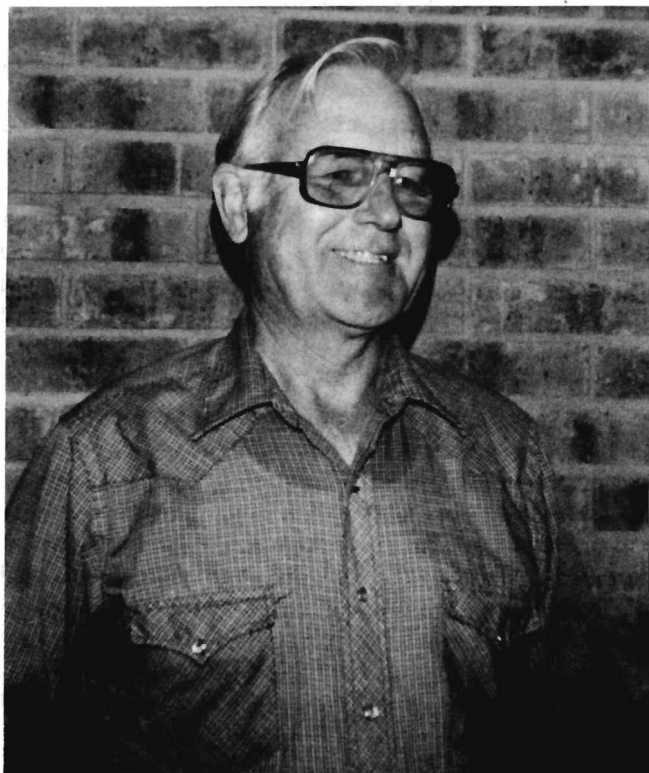
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# THE 1985 ROBERT F. HEIZER MEMORIAL AWARD



Charles K. Chandler

In recognition of his Outstanding Contributions to the archaeology of Southern Texas, the 1985 Robert F. Heizer Award was presented to Mr. Charles K. Chandler of San Antonio, Texas. During 1985, Mr. Chandler (or C. K. as he is generally known) was deeply involved in every aspect of the archaeology of our region; from the basic location and recording of sites, to loyal participation in the on-going STAA excavation at the Dan Baker Site, to recording private collections, report writing, and active support of local, regional, and state archaeological groups. He spent a very busy year in 1985 as the president of the Texas Archeological Society (and had served admirably as its treasurer for several years previously). He actively supported the restarting of the Coastal Bend Archeological Society and participated in the 1985 Coastal Bend Palaver to help define regional archaeological plans and issues. He did microwear analysis on lithic artifacts from a number of collections, collected faunal specimens for comparative collections at several universities, and helped locate a number of unreported metal arrow points. On and near some land he and Virginia own in Terrell County, the Chandlers located more than a dozen hearth fields which they carefully recorded, documented, and reported to the Texas Archeological Research Laboratory. Wherever he travels in the state, C. K. observes, notes, and records archaeological sites, collections, and artifacts. In 1985, he personally reported more sites to TARL for site numbers than any other single individual (not part of an institutional survey). The extensive range of his archaeological activities, his selfless advocacy of all aspects of Texas archaeology, and his precise, very methodical approach to all archaeological problems represent a major contribution to the science of archaeology in southern Texas. Thus, it is with great pride that the STAA awards C. K. its Robert F. Heizer Award for 1985.

## NOTES ON SOUTH TEXAS ARCHAEOLOGY: 1986-1

Thomas R. Hester

## The Need for Site Recording in Southern Texas

Perhaps the greatest contribution made by avocational archaeologists in the study of Texas prehistory has been their remarkable record of site reporting. The honor accorded to C. K. Chandler, reported elsewhere in this issue, is one that is richly deserved. In addition to all of the varied archaeological activities in which C. K. is involved, he regards site reporting as his highest priority. He has reported hundreds of sites from throughout the state, many of these in southern Texas and out into southwest Texas in Terrell County.

Of course, there are other STAA members who also take the time to fill out site survey forms, plot the sites on maps, and send these materials to the Texas Archeological Research Laboratory (TARL) in Austin, the central state site file, for permanent filing and assignment of site numbers. Except perhaps in C. K.'s case, the rest of us are not doing as much as we could in terms of site recording. Meanwhile, the rate of site disappearance -- through construction or as a result of looting and vandalism -- continues apace.

Traditionally, archaeologists, both professional and avocational, most commonly record sites found during the course of a survey. However, almost as frequent are those sites brought to our attention through late-night telephone calls, contacts with relic-collectors, or through acquaintances or family members who have found "arrowheads" on their property. These are leads that we need to follow up with more tenacity. This is easy for me to say...but hard for me to do! I usually have a stack of telephone messages, letters, along with notes scrawled on scraps of paper, that relate to reports of new sites. Recently, it dawned on me that such accumulations would make a very good semester project for an enterprising graduate student. Luckily, I found two of them, John and Betty Guntharp, MA students at UTSA and long-time members of the STAA. During Spring semester, 1986, they have contacted a number of persons who had initially made reports of sites to me; they have also gone into the field to make contacts with landowners and formally record the reported sites. As a result, at the end of the semester, the Guntharps turned in a thick folder of carefully organized notes, representing contacts with five persons. Three of these contacts consumed most of their time, leading to the documentation of 13 sites in south-central Texas. Each site had been recorded on the State site survey form (the "long" one; see below) and carefully plotted on sections of USGS maps. They still have a number of additional contacts to make, and I am looking forward to their continued efforts.

Persons with data on unreported sites often show up at STAA meetings or at public lectures. In seminars on regional prehistory that I have conducted in Uvalde, Bandera and Jourdanon, a lot of people showed up with collections and materials that they wanted identified. Usually, they will openly provide data on the sites these collections represent. It was fortunate for me to have C. K. Chandler, Jimmy Mitchell, and Sue Turner along on some of these seminars, as they were able to work with these individuals and record a number of new sites. We were especially impressed, in November 1985, by the number of people at the Jourdanon seminar who were willing to provide site data. C. K. has set himself a goal of recording many of these sites in the Jourdanon area, and I am sure he would welcome some help!

Let's turn now to some of the basics and some of the problems involving proper site reporting. First of all, professionals keep changing the "rules." For example, the old, traditional one-page survey form (see page 9 in **Digging into South Texas Prehistory**) that we have all used for years has now been

essentially replaced by a State of Texas Archeological Site Data Form six (6) pages long. No doubt it increases the value of a site survey record; although you have the feeling that you may as well have done a site report for publication by the time you complete the form! The form not only intimidates some professionals, it also can scare away those persons, with only casual interests in archaeology, who might want to record a site. Fortunately, a "short form" is available (see *La Tierra*, Vol. 12, No. 1, pp 27-29), and this will help bridge the traumatic transition from the 1-page to the 6-page forms. I keep a supply of 1-page "old" forms around to provide to persons who call in or who drop by the office and lab, as this form is one that they will usually fill out, thereby giving us a set of data on specific sites. If we can "hook" them, the longer form -- providing much more detail -- will follow! My point here is that we should not make the relic-collector or interested person think that site reporting is something difficult and highly technical. With or without a 1-page, 2-page or 6-page form, we need to get from them basic data on site location and the nature of the archaeological materials that have been found.

Following are a few tips that might help you get organized for a more productive site documentation program:

1. Get a supply of site survey forms. You can write to the Office of the State Archeologist, Texas Historical Commission, P.O. Box 12276, Austin 78711 for a free supply of the State forms (phone Nancy Huffman, 512-463-6090). Or, you can get a copy from the STAA, the TAS, or UTSA and make photocopies for yourself. The one-page site survey forms are also available from the latter three organizations.

The Texas Archeological Research Laboratory has also just issued some new instructions involving -- and I hate to tell you this -- yet another supplementary form. This is a detailed "Key Site Card" that contains entries that summarize the site survey form; it enables easier and quicker access to site data at TARL. Write to Carolyn Spock, Head of Records, TARL, Balcones Research Center, 10,100 Burnet Road, Austin 78758. Eventually, these cards will need to be filed with the survey form in terms of formal documentation.

2. Get some good maps. Key to site documentation is an accurate plotting of a newly reported site. Indeed, it is likely most important to get the site plotted on a map first, and worry about the site survey form in due time. The best maps are the USGS topographic maps or quadrants that cover southern Texas; many of these have been newly updated. Some can be obtained in San Antonio, as at Ferguson's Map Company. Or, they can be ordered from: Branch of Distribution, Central Region, US Geological Survey, Federal Center, Box 25286, Denver CO 80225. They will send you an index map of quadrangle maps available for Texas, along with a price list. [see T. Dolezal's useful paper in *La Tierra* 12(1)]. An updated State Index Map of USGS topographic quadrangles is at the Archaeology Lab at UTSA; stop by and look at it in terms of the maps you need or call Anne Fox or Lynn Highley at the lab (512-691-4462). The lab also has sets of maps for almost all of southern Texas, although these are generally for "lab use only."

County highway maps are convenient for quick plotting of sites, although they do not provide the detail found on the USGS maps. To order maps for your county or counties in your area, you can select from "full scale", "half scale" and "quarter scale". Write to: State Dept. of Highways and Public Transportation, Attn: File D-10, P.O. Box 5051, West Austin Sta., Austin 78763. There is a small charge for each type of map.

3. Get crucial information. Before your informant escapes, with or without a survey form or map, be sure you record vital information about the

site. Location, type of site, site condition (is it threatened? being pot-hunted?), collections from the site, and landownership should be foremost. Any sketch maps that the informant might give you about site location or where materials were found within a site area are very valuable. Make tracings or sketches of artifacts your informant has brought to show you. If you have access to a photocopy machine, just laying the specimens on the glass and copying them will make a remarkably good record (be careful not to scratch the glass; our Center archaeologists have gotten in trouble more than once for this curious practice!).

4. Get the site information to a repository. While retaining a full copy for your own files, mail the site materials to Carolyn Spock at TARL (address above). Or you can file site data with the STAA, UTSA, and other local colleges, organizations, and museums. It is important, however, that these institutions make sure that the records find their way to the central files at TARL. The UTSA Friends of Archaeology (c/o Center for Archaeological Research) has site documentation as one of its goals and will assist in the costs of photocopying and other necessary aspects of site recording. Write the Friends at UTSA (San Antonio 78285).

Keep those site survey forms, and, ultimately, the key site cards, coming in!

\* \* \* \* \*

#### NEW PUBLICATIONS FROM THE UTSA CENTER FOR ARCHAEOLOGICAL RESEARCH

Nine new publications have been recently released by the Center for Archaeological Research, The University of Texas at San Antonio. Four deal with results from historic site investigations, three with prehistoric research, and two with Maya sites.

The long-term archaeological investigations in the Choke Canyon Reservoir, on the Frio River, southern Texas, are now completed. Twelve volumes have resulted, the current one a 592-page report, "The Prehistoric Sites at Choke Canyon Reservoir, Southern Texas: Results of Phase II Archaeological Investigations." This is Volume 10 in the **Choke Canyon Series**, authored by Grant D. Hall, Thomas R. Hester and Stephen L. Black, with numerous contributing authors. Kenneth M. Brown has authored No. 133 in the **Archaeological Survey Report (ASR)** series, dealing with test excavations in Universal City. **ASR** No. 150 describes investigations of a shell midden in Harris County (authors are A. J. Taylor, along with R. F. Scott, Anne Fox and Joe Labadie).

Four volumes in the **ASR** series, Nos. 116, 137, 160, and 161 report historic site studies. These are, respectively, excavations at Laredo City Toll Plaza (by William Folan and others), research at the United States Arsenal in San Antonio (by Anne Fox), a report of additional monitoring at the Fairmount Hotel relocation site (by Joe Labadie; the larger volume on the Fairmount excavations is in press), and excavations of the San Pedro Acequia (by Wayne Cox).

Maya research by the Center is reported in R. E. W. Adams' (ed.) **Rio Azul Reports, No. 2, The 1984 Season**, at this Guatemalan site. Research in Belize is reported in "An Ancient Maya Hafted Stone Tool from Northern Belize," by Harry J. Shafer and Thomas R. Hester -- a unique specimen found preserved, still with a wooden handle, in a bog deposit.

For information on these and other Center publications, write to the Center, UTSA, San Antonio, 78285-0658 or telephone 512-691-4378. When writing for a Center publication list, please enclose \$ 1.00.

## THE MEYERS SPRINGS AND BAILANDO SHELTERS: ICONOGRAPH PARALLELS

Solveig A. Turpin

## ABSTRACT

A pictograph of four dancers at Site 41 VV 666 is quite similar to a panel at Meyers Springs (41 TE 9), some 80 miles away, and possibly to other, more distant sites. These two pictographs appear to be expressions of the same ideogram, possibly portraying a common ritual event.

## THE BAILANDO SHELTER PICTOGRAPH

Among the over 50 pictograph sites recorded during the past two years of intensive survey in the Lower Pecos River Region, one is unique, bearing little resemblance to the defined classic styles of this cultural area. The primary panel at site 41 VV 666, Bailando Shelter, consists of a line of four dancers, flanked by shield symbols and hooked vertical lines, and four miniature animals, two skunks and two turkeys, all black (Figure 1). Their context is a large overhang above the verdant banks of Brite Creek, a spring-fed tributary entering the Rio Grande below Amistad Dam. Flooding has scoured the shelter and erased any possible artworks from the lower walls. The dancers panel in this site is on a high, flat face below the ceiling on the upstream corner, reached by climbing over two meters to a broad ledge. The figures are in excellent condition; only one of the small turkeys has suffered from natural exfoliation.

## THE MEYERS SPRING SITE

Although 41 VV 666 constitutes an anomaly in the known pictograph record near the mouth of the Pecos and Devils Rivers, the heartland of the Lower Pecos cultural area, the line of dancers has strong parallels with a similar ideogram at Meyers Springs (41 TE 9) in Terrell County (Jackson 1938:Site 56, Pl. CL; Kirkland and Newcomb 1967:Pl. 73) and, to a lesser degree, with Heuco Tanks near El Paso and sites in the Panhandle of Texas. At Meyers Springs, nine figures wearing single feather headdresses and waist-level garments, dance in a line, holding hands (see cover illustration). The shield symbols are interspersed between the dancers. Their apparel, a tailed or tasseled belt, duplicates that of the dancers at 41 VV 666. The latter panel seems to be a simplified version of the same event.

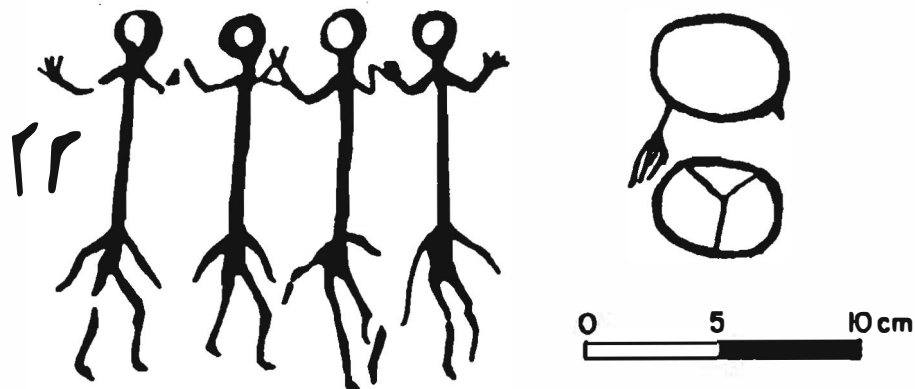


Figure 1. Dancers from the Bailando Shelter (41 VV 666). (Illustration by Abbie Treece, Texas Archeological Research Laboratory.)

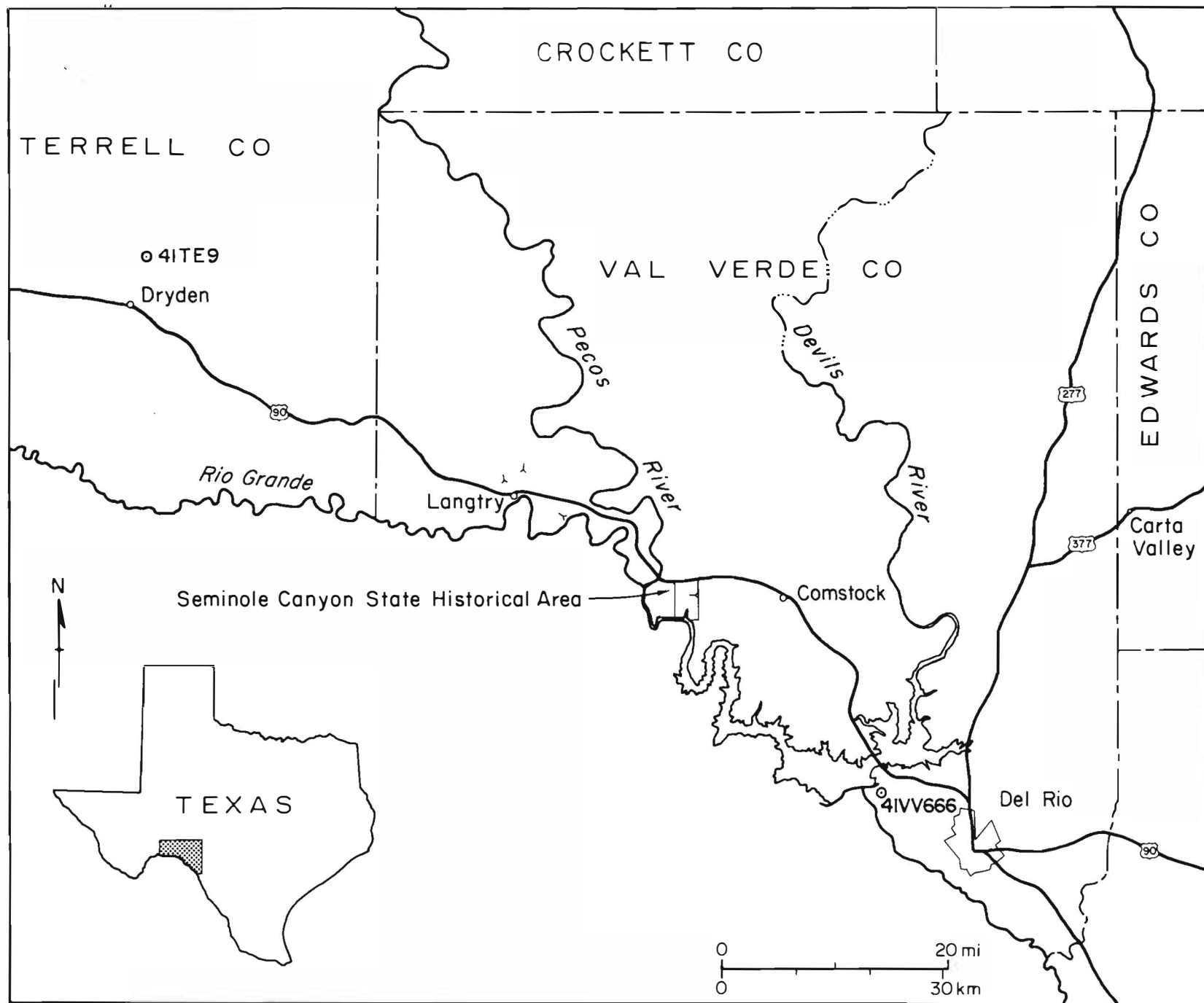


Figure 2. Locational Map: 41 TE 9 - The Meyers Springs Site; 41 VV 666 - Bailando Shelter.



## DISCUSSION

Kirkland (Kirkland and Newcomb 1967:119) tentatively assigned the hand holding dancers of Meyers Springs to the middle period of paintings at that site, later than the Archaic Pecos River style and earlier than the obviously historic scenes. Also included in the middle period at Meyers Springs are figures resembling, to some degree, the Late Prehistoric Red Monochrome style of the Lower Pecos region (Turpin 1986). Thus, middle period is a relative term, applicable only to this site. Stylistically, the dancers are more like the realistic post-Contact drawings, suggesting at least a protohistoric if not an early historic age. The shield symbols found at both sites are uncommon in Archaic pictographs of this region (Gebhard 1965) but are characteristic of the Late Prehistoric and historic Plains artworks such as those of the historic Comanche. In the Lower Pecos the convention of drawing human heads as blank circles is found in the Archaic Red Linear style and in the later, protohistoric and historic pictographs. The circular heads, rectangular bodies, bent legs, shield symbols, single feather headdress and the portrayal of action are characteristic of Early Biographic art dated between 1775 and 1830 in the northern Great Plains (Keyser 1984). Thus, a reasonable hypothesis is that the dancing figures of the Lower Pecos were introduced by the movement of Plains Indians into the region.

The physical setting of the sites is in accord with the distribution of the later Lower Pecos pictographs. Both sites are shelters on spring-fed tributaries above their confluences with larger watercourses, a common locale for historic panels. In addition, the rapid exfoliation of the walls at 41 VV 666 would work to erase pictographs of any great antiquity.

The significance of the parallels between Meyers Springs, a complex site with many drawings of varying style and ability, and 41 VV 666, an isolated panel, is in the distance between these two expressions of the same ideogram. 41 VV 666 lies a straight-line distance of 80 miles southeast of Meyers Springs (Figure 2). By the most logical travel route, to a crossing high on the Pecos River and down the interfluvium between the Pecos and the Devils Rivers to the Rio Grande, this distance can easily be doubled or tripled by the difficult terrain characteristic of this region. Both sites are intended to portray a ritual event, observed by both artists and of sufficient importance in their cultural systems to merit recording on shelter walls. Although additional examples may be found, the distance between these isolated scenes demonstrates the distance that an idea could be transported in protohistoric times. It furthermore underscores the importance of the anomalous pictographs in reconstructing the possible range of aboriginal movements. It seems probable that this motif will be repeated at other sites, permitting a clearer definition of the areal extent of this one ideogram. The present distribution clearly demonstrates that the presently drawn boundaries of the Lower Pecos River region were no barrier to aboriginal travel especially during the social upheavals of late prehistory and early history. Distribution studies of these and other iconographic parallels can ultimately define the movement of people and ideas at various times in prehistory.

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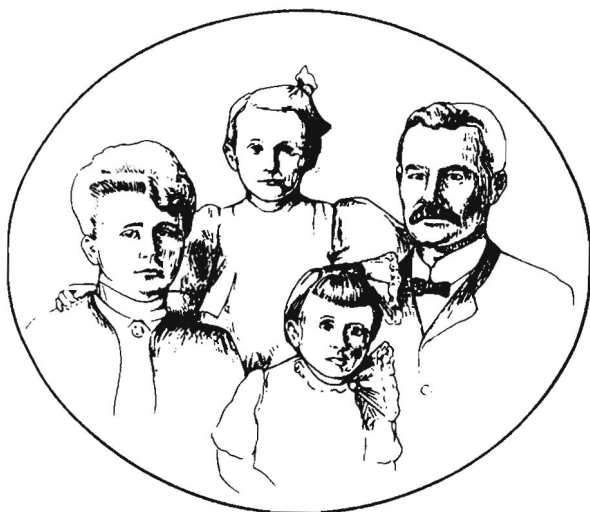
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\* \* \* \* \*

TEXAS HISTORICAL COMMISSION  
Office of the State Archeologist Report 34



## THE BUTTRILL RANCH COMPLEX

Brewster, County Texas

*Evidence of Early Ranching in the Big Bend*

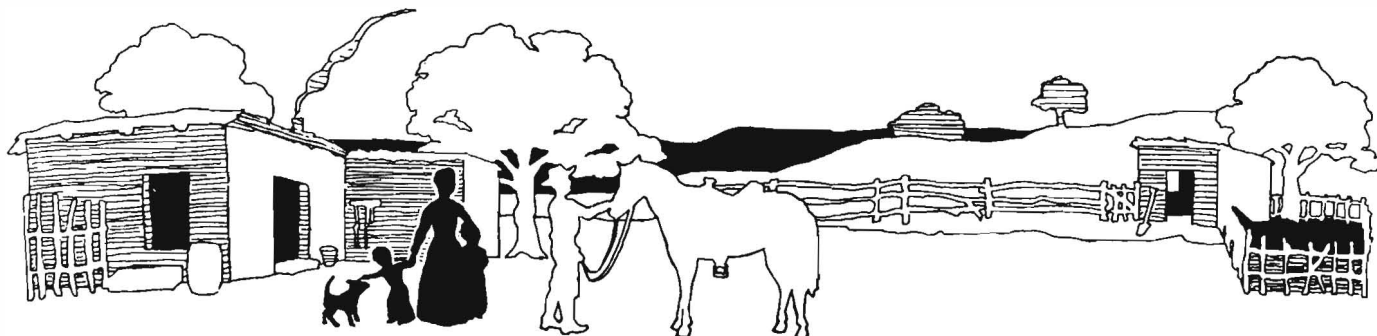
By Virginia A. Wulfkuhle

An adobe ruin near Buttrill Spring in the Rosillos Mountains is the site of the Buttrill Ranch headquarters, dating to the early 20th century. This report of archeological investigations includes a concise overview of ranching in the region, a brief history of the Buttrill family and later occupants of the ranch, a detailed description of the ruins, and analysis of a small collection of artifacts from the surface of the site. Accounts by local people, including a daughter of the Buttrill family who lived at the site, add color and depth to the historical background. Also included are discussions of the environmental setting and previous archeological investigations in the area. Located on the North Rosillos Mountains Ranch, this site was recorded in 1980 by the Office of the State Archeologist as part of a larger study of the archeological resources of the ranchlands, then owned by the Harte family and later donated by them to the Texas Nature Conservancy. *Office of the State Archeologist Report 34. xii + 65 pages, 47 illus. \$7.50 + .46 tax*

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# THE LEYENDECKER BURIAL, COLORADO COUNTY, TEXAS

Margaret Ann Howard

## ABSTRACT

Skeletal materials recovered from the Leyendecker Site (41 CD 62) were recently analyzed. The burial was probably a young adult male (about 23) approximately 5 feet 8 inches tall, who suffered an ear infection and multiple dental caries including abscesses of both third molars. There were other indications of physical stress or infection but no evidence of the actual cause of death. Based on cultural materials recovered elsewhere on the site, this young man probably lived during the Late Archaic or Neolithic period.

## BACKGROUND

The Leyendecker site (41 CD 62) is a terrace site on a relict channel of the Colorado River, in Colorado County, Texas (Figure 1). The Texas Archeological Survey of the University of Texas at Austin was notified in early February 1977 that Crockett Leyendecker of Ellinger had removed half of a skeleton at this location in the course of gravel quarrying operations. The site was recorded by Elton Prewitt of the Survey later that month.

Cultural deposits at the Leyendecker site were exposed in a plowed field as well as in the quarry profile; site size was approximately three to five acres. Prewitt examined the landowner's projectile point collection and estimated that most of the site deposits dated to the Late Archaic and Neolithic [Editor's Note: Also called the Late Prehistoric] periods; however, the collection also included a dozen **Clear Fork** gouges, one **Gower** dart point and one **Uvalde** dart point, indicating some Early Archaic occupation.

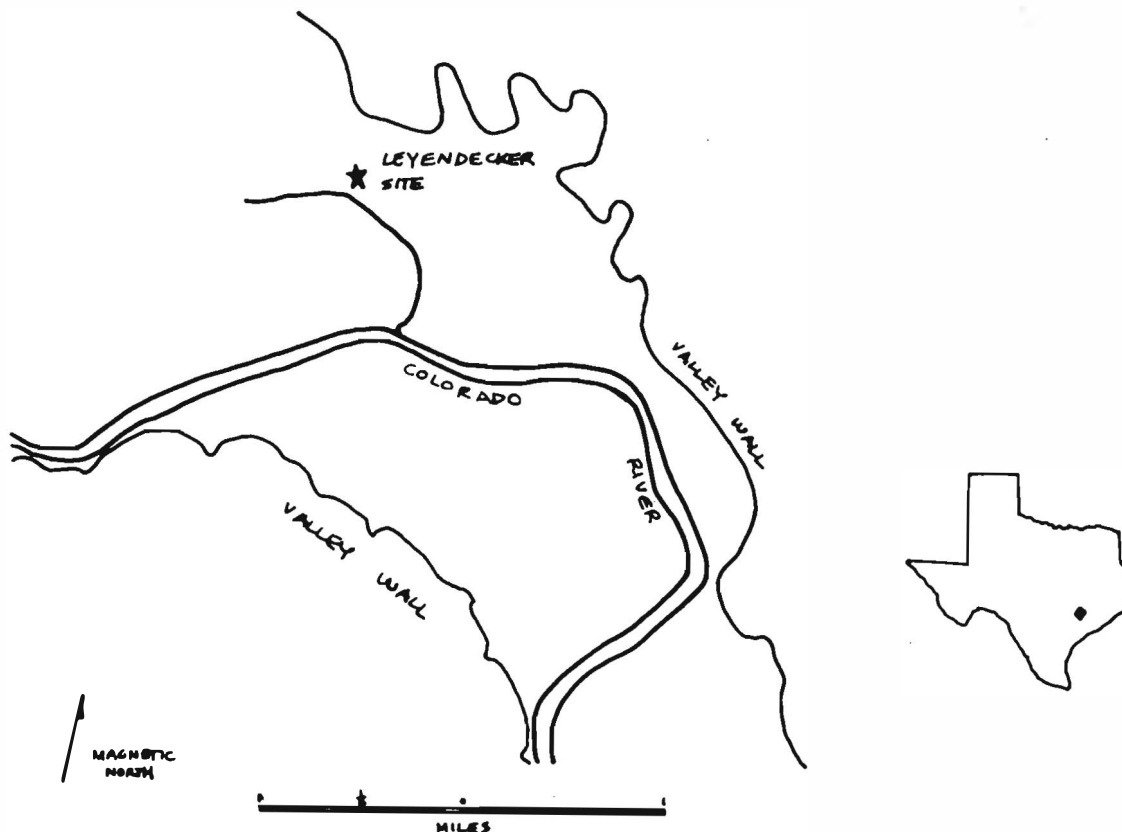


Figure 1. Topographic Setting of the Leyendecker site, Colorado County, Texas

In profile, the soils in the terrace deposit were over 3.5 m deep, overlying a layer of Pleistocene gravels (see Figure 2a). The uppermost stratum of the deposit varied from 100 to 180 cm in thickness and consisted of a dark grey midden-stained sand containing burned rock and lithic debitage. This stratum was underlain by a layer of gravel 20 to 40 cm thick. This gravel stringer was intersected by the human burial. Below the gravel stringer, 1.5 to 2.2 m of unconsolidated sand overlay the Pleistocene gravels.

Prewitt returned to the Leyendecker site in March 1977 and removed the remaining half of the burial. He found evidence of a burial pit beginning above the burial, filled with a mixture of gravel and midden soil. The pit cut through the thin gravel layer; loose gravel was observed in the fill of the pit. The top of the pit began about 80 cm below ground surface and was dug to about 180 cm.

Prewitt made several observations on the positioning of the burial (March 14, 1977 field notes; see Figure 2,b):

Only the upper torso, including both arms and mandible (with part of maxilla and frontal bones of face) remained *in situ*. Skull was removed previously by Crockett Leyendecker's older son; pelvis and legs removed by dragline. Body oriented northwest/southeast with head to southeast and facing to the northeast. Lying on right side at an incline. Arms tightly flexed; right hand over right upper humerus and under left radii and ulna; left hand lying directly beneath mandible.

The burial had no associated grave goods, so its cultural affiliation can only be assessed by the age of the site deposits around it. This evidence, though tenuous, suggests that the burial was Late Archaic to Neochaic in age. The Leyendecker site was entirely destroyed in 1978 through gravel quarrying operations, so a more accurate estimate of the burial's context is not possible.

#### ANALYSIS OF SKELETAL MATERIALS

The skeletal material recovered by Prewitt at 41 CD 62 was brought to the office of Prewitt and Associates in Austin, Texas during January 1982. Margaret Howard cleaned, restored and studied the skeletal material. Some of the bones were still encased in blocks of matrix; these were exposed with dental picks and photographed *in situ*. The articulated bones of the left hand were found covering the right side of the face, verifying Prewitt's observation that the face was cushioned in that hand. All bones were washed in water, and some were reconstructed with Elmer's Glue. The cranium had been covered with wax by Arthur Leyendecker, and was deformed and cracked; the wax was removed by soaking the cranium in water so that the wax would flake off.

About half of the elements of the Leyendecker site skeleton are absent (Figure 3). Fifteen of the 24 vertebrae are present, but from the ninth thoracic vertebra down, the vertebral column, pelvis, femora, tibiae, fibulae and feet are absent. Also missing are a few of the medial and distal phalanges and the pisiform (a wrist bone) of the left hand. Thus sex and stature estimates are made on the basis of limited information.

The Leyendecker burial appears to be an adult male 23 to 25 years of age and about 175 cm (5 feet 8 inches) tall. Pathology is evident on some of the elements; most notable are a bony exostosis in the left external auditory meatus (ear) and a general lipping and attenuation of the bony crests on most of the bones. The heavily ground occlusal (chewing) surfaces of the dentition suggest that the individual is of aboriginal origin.

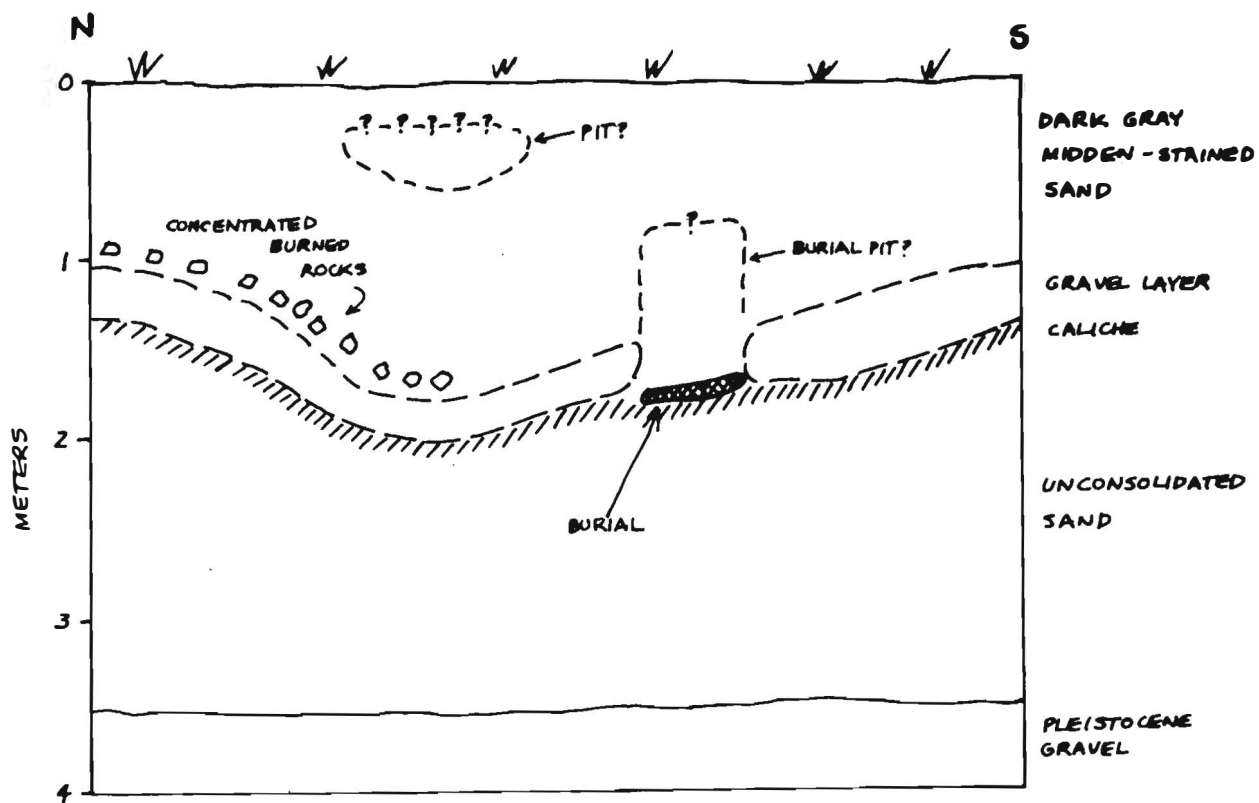


Figure 2a. The Leyendecker Site, 41 CD 62, Stratigraphic Position of Burial (From field sketch by Elton Prewitt, March 14, 1977).

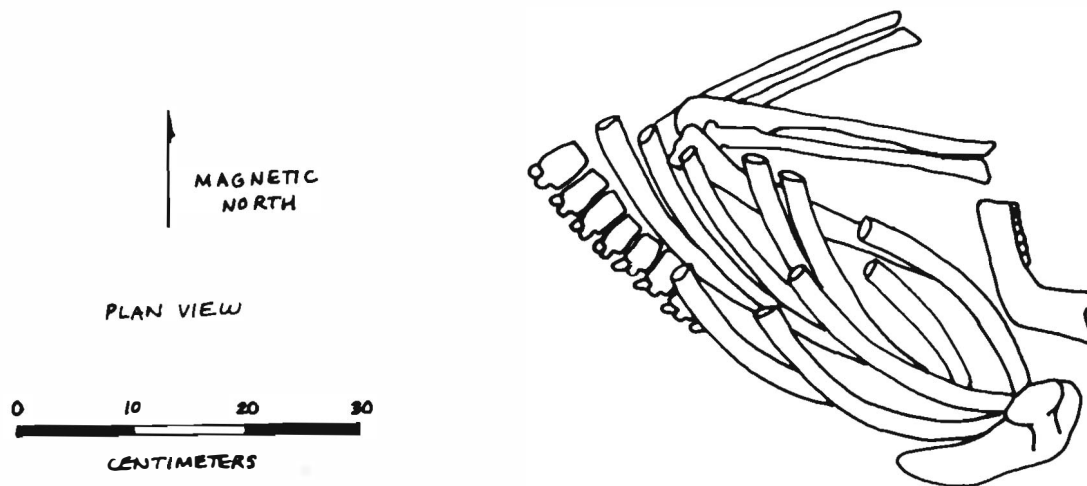


Figure 2b. The Leyendecker Site, 41 CD 62, Burial Position (From field notes and photographs).

## AGE ESTIMATION

Age has been assessed on the basis of three traits: cranial suture closure, epiphyseal closure (indicators of bone growth), and dental eruption and occlusal wear. On the basis of McKern and Stewart's (1957) system of rating cranial suture closure, the age of 22.7 years was obtained. Most of the sutures are open; the coronal suture is one-quarter closed, and the metopic and basilar sutures are completely closed. In terms of epiphyseal (long bone) closure, the clavicles are the only elements that are in an epiphyseal state; their medial epiphyses show evidence of cartilage attachment. This epiphysis usually fuses between the age of 18 and 25 (McKern and Stewart 1957:97). Dental eruption suggests an age of greater than 21, because the third molar has completely erupted (Ubelaker 1978:112-113). Occlusal wear suggests a greater age than any of the other measures, rating from 25 to 35 on Brothwell's (1981:72) index of occlusal wear.

An estimate of the sex of the Leyendecker burial has been made although the definitive characters of the pelvis cannot be observed. On the cranium, non-metric characters suggesting a male identification are the square lower margin of the mandible and the smooth surface of the superior interior orbit (Brothwell 1981:56-61). Large mastoid processes also suggest a male identification. However, the supra-orbital ridges are not prominent, and the glabella minor (prominence between the eyebrows) is small, suggesting female identity. The overall robusticity of the postcranial skeleton (Brothwell 1981:61-63) tips the balance in favor of a male identification.

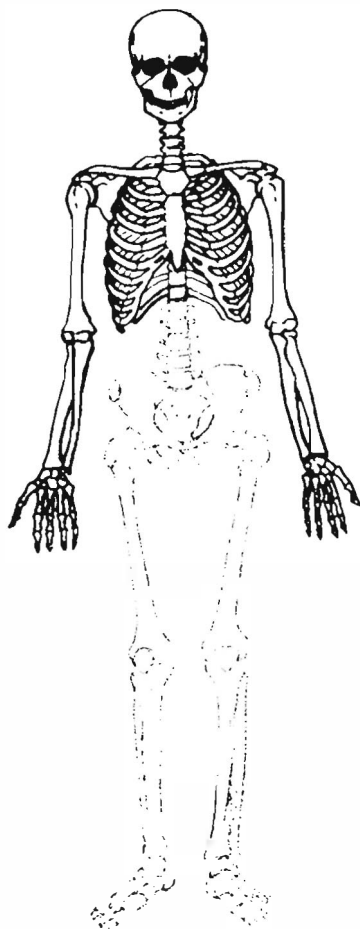


Figure 3. Leyendecker Site Burial: Elements recovered.

## STATURE

Stature estimates were obtained from the length of the long bones, using the regression formula developed by Trotter and Gleser (1952-496) from white male populations. The measures and estimates are given in Table 1.

TABLE 1. Stature Estimates

<u>Element</u>	<u>Maximum Length*</u>	<u>Stature Estimate**</u>
left humerus	312 mm	167.77 cm
right humerus	316 mm	169.49 cm
left radius	260 mm	178.47 cm
right radius	263 mm	179.74 cm
left ulna	267 mm	174.67 cm
right ulna	276 mm	177.69 cm

\* Taken with an osteometric board according to Bass 1971

\*\* From Trotter and Gleser 1952:496

The stature estimates vary from 167-180 cm (5 feet 5 inches to 5 feet 10 inches). An average of these measures yields 174 cm (68.10 inches, or about 5 feet 8 inches).

## PATHOLOGY

Pathology is evident on most of the elements. Porous bone is present on the mastoid processes and occipital bones of the cranium; it is also present on the clavicles and scapulae. A bony exostosis has formed in the left external auditory meatus, indicating an infection of the ear (Brothwell 1981:129,139). Goldstein (1957:300-301) found this to be a common pathology in Texas Indian crania. The dentition exhibits caries (cavities), abscesses and resorption (loss) of bone around the teeth. In the mandible, there are caries in the second right premolar and the third left molar, and resorption is evident around both of the third molars. The maxilla has abscesses in both third molars, as well as numerous caries. On the left side, the abscess has caused the deterioration of the maxilla, reflecting the advanced state of infection (Brothwell 1981:156). In the postcranial skeleton, an anomalous pit on the inter-trochlea/medial epicondyle surface may also indicate an infection.

Asymmetry of the skeleton can be observed in a number of elements (Table 2):

TABLE 2. Asymmetric Elements

<u>Element</u>	<u>Character</u>	<u>Right</u>		<u>Left</u>
humerus	medial epicondyle	smaller	<	larger
ulna	crest for insertion of supinator muscle	pronounced	>	normal
hand	4th metacarpal thickness	normal	>	attenuated
hand	4th and 5th metacarpals	shorter	<	longer
long bones	length (see Table 1)	longer	>	shorter
thoracic vertebra 5-8	rib articulation & body	reduced	<	pronounced

The asymmetry is not limited to one side but varies from one side to the other throughout the upper body. This seems to represent normal variation or perhaps such qualities as handedness. It does not appear to be a pathological trait.

Stress is evidenced by lipping, prominent muscle marking, and well-developed crests on a number of elements. Some of these properties can be attributed to the male identification, but the extent of the evidence of stress suggests that physical stress or disease may be a contributing factor. The vertebrae show much evidence of stress; the vertebral bodies are lipped, and the costal elements are prominent. All of the bony crests on the long bones are prominent, as well as on the ribs and phalanges. The cranium has prominent muscle markings and a well-developed medial crest on the occipital bone. The mandible also has prominent muscle attachments.

Genetic markers observed in this individual are few in number. A rhomboid fossa (rectangular depression) on the inferior surface of the left clavicle is a character that occurs in low numbers in many human populations. However, the high degree of tooth wear suggests an aboriginal identification. Extensive tooth wear has been commonly observed in Texas Indian populations (Goldstein 1948:66; Malina and Bramblett 1981:346-347).

#### ACKNOWLEDGEMENTS

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# ARCHAEOLOGICAL INVESTIGATION AT THE MEANS SITE (41 NU 184), NUECES COUNTY, TEXAS

Robert A. Ricklis and Rita R. Gunter

## ABSTRACT

The Means Site, 41 NU 184, is located west of Corpus Christi, Texas on the edge of the Pleistocene terrace which overlooks the southern margin of the lower Nueces River floodplain. Archaeological investigation at the site was in two phases: intensive surface inspection and excavation. Surface examination involved the observation and notation of the present condition of the site, including soil characteristics and natural and artificial impacts to the site, as well as the collection of artifacts and grab samples of lithic debitage and faunal remains. Excavation was initiated as a test to determine the subsurface characteristics of the site deposits and the data yield potential of subsurface investigations. An apparent Archaic living surface and associated structure was discovered, indicated by eight post molds.

## SITE DESCRIPTION

The Means Site is located in the north central portion of Nueces County on a 22-meter rise located approximately 900 meters south of the present channel of the Nueces River (see Figure 1). The rise is a portion of the dissected Pleistocene terrace of the Nueces River, and the location commands an excellent view of the broad floodplain to the north and of the level uplands in other directions.

Occupational debris, consisting of chert debitage and scattered projectile points and other lithic artifacts, was observed over an area of approximately three acres. The plan of the site is oval, the long axis running roughly east-west, parallel to the edge of the rise.

A modern hedgerow approximately bisects the site along a north-south line. To the west of the hedgerow the site has been under cultivation for some years. To the east, the soil appears to have never been plowed, though portions of the latter area have been disturbed by soil erosion which has created a network of shallow gullies (Figure 2). Fairly extensive grass-covered areas between these erosional cuts appear intact, however.

Though the entire site is littered with valves and fragments of the brackish water clam, *Rangia flexuosa*, by far the most dense accumulation of these shells occurs in the western portion of the site. In this area, it appears that cultivation has exposed what must have been a rather extensive and dense midden of *Rangia flexuosa*. Despite erosional exposure in the eastern portion of the site, this shell species is present only as a scatter in that area.

The soils on and in the immediate vicinity of the site pertain to the Clareville Complex series and Victoria Clay (Franki et al. 1960; Survey Map for Nueces County). A characteristic soil profile, based on examination of the edges of erosional cuts in the area selected for excavation, may be seen in Figure 3. Three natural zones may be defined: 1) An upper zone, 10-18 cm thick, consisting of brown sandy loam. Faint lensing in this zone of sandy soils of varying particle size suggests eolian deposition; 2) A dark brown, very dense zone of clay 30-40 cm thick with, apparently, a high organic content (Victoria Clay); and 3) a lowermost zone of undetermined thickness of light tan Pleistocene Clay. Judging from surface examination in areas of erosion and from our excavation, it is apparent that cultural material is confined to the uppermost loam zone and to the top two or three centimeters of the underlying dark brown Victoria Clay. Since, as will be discussed below, diagnostic cul-

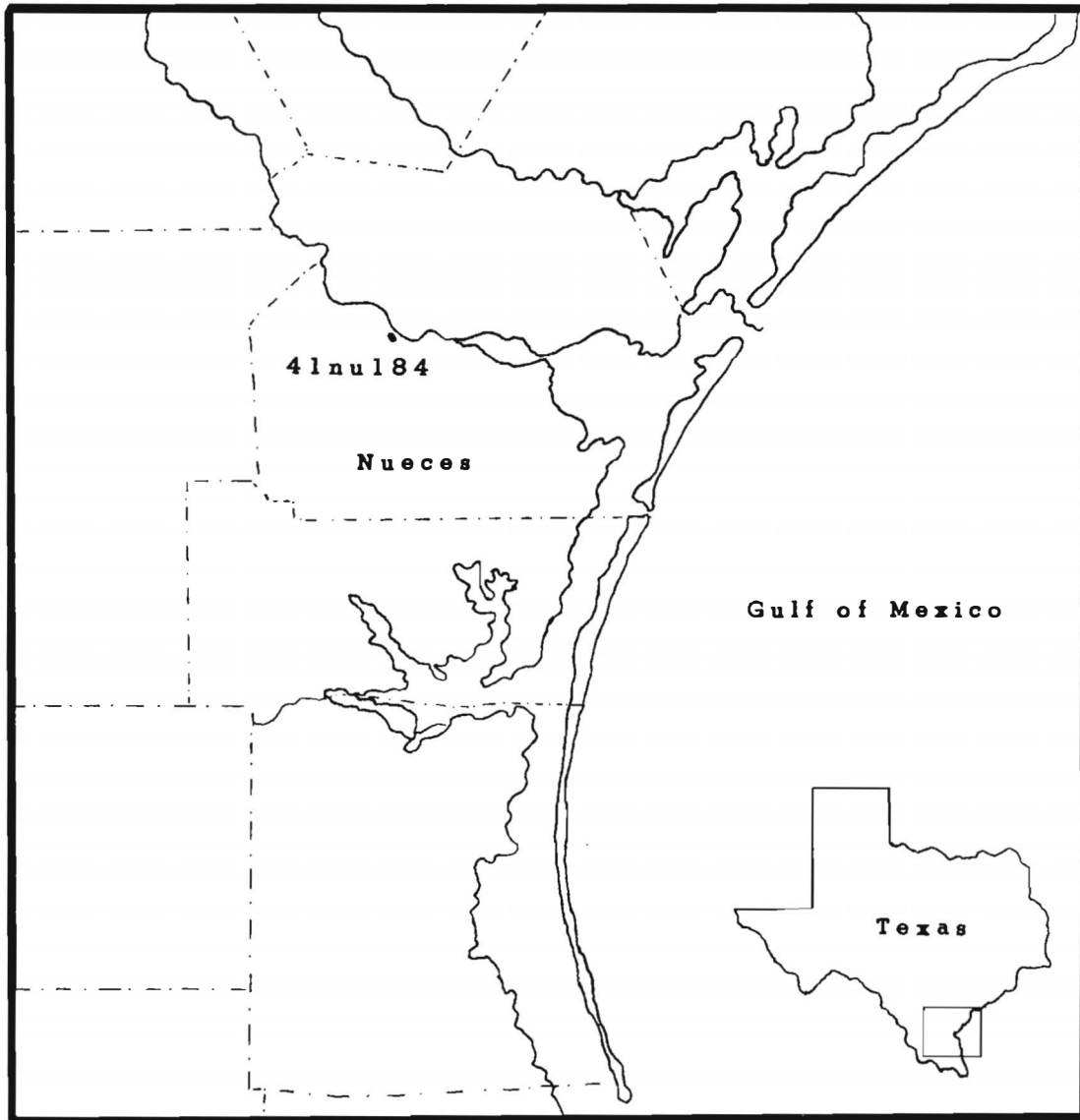


Figure 1. Location of the Means Site, 41 NU 184, Nueces County, Texas Coastal Bend area, Southern Texas. The site is about 900 meters south of the Nueces River on a dissected Pleistocene terrace.

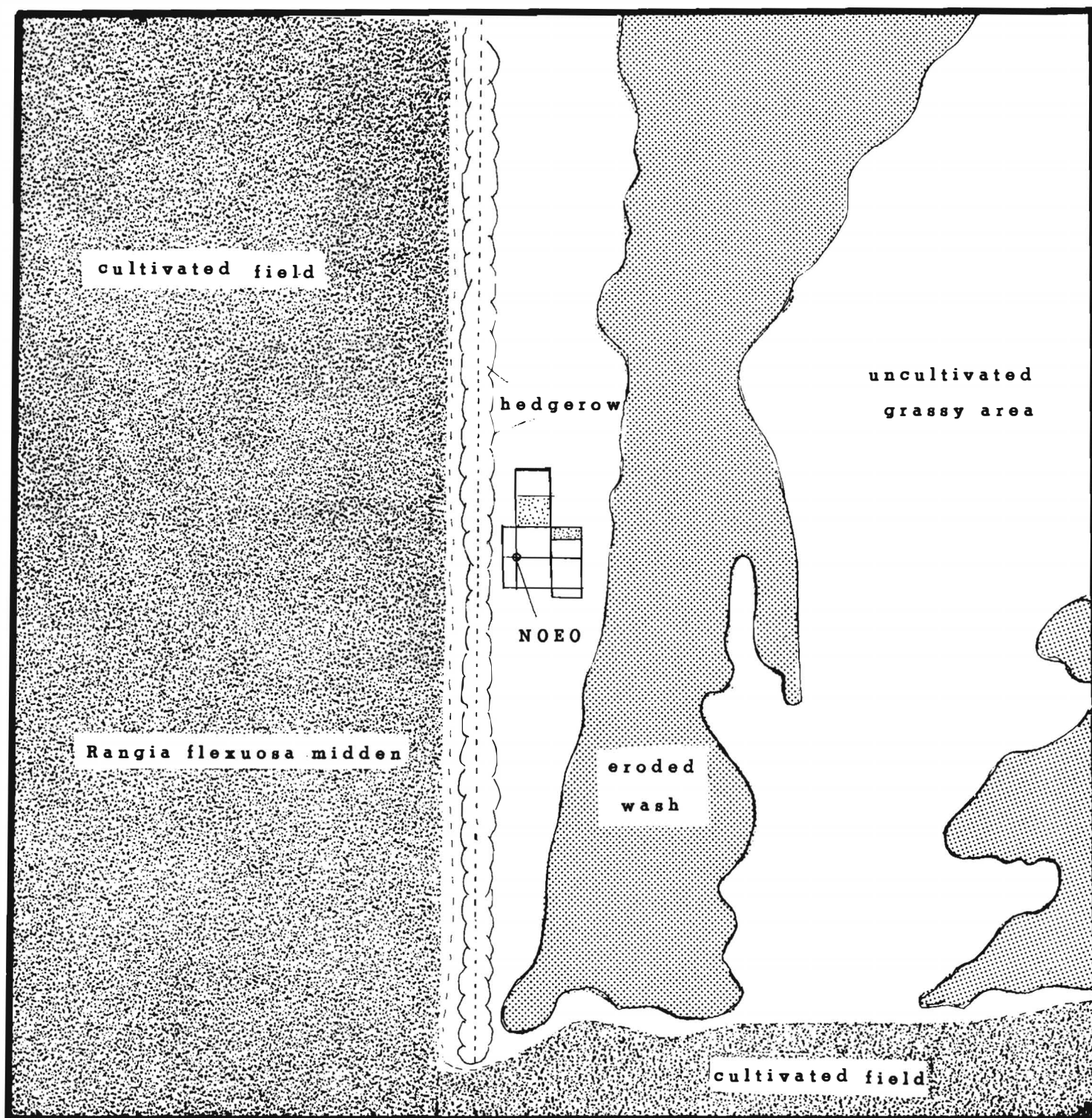


Figure 2. General Site Diagram of the Means Site. The hedgerow bisecting the area is oriented approximately north-south. Excavations indicated by the grid around NOEO (speckled areas in the grid are unexcavated areas).

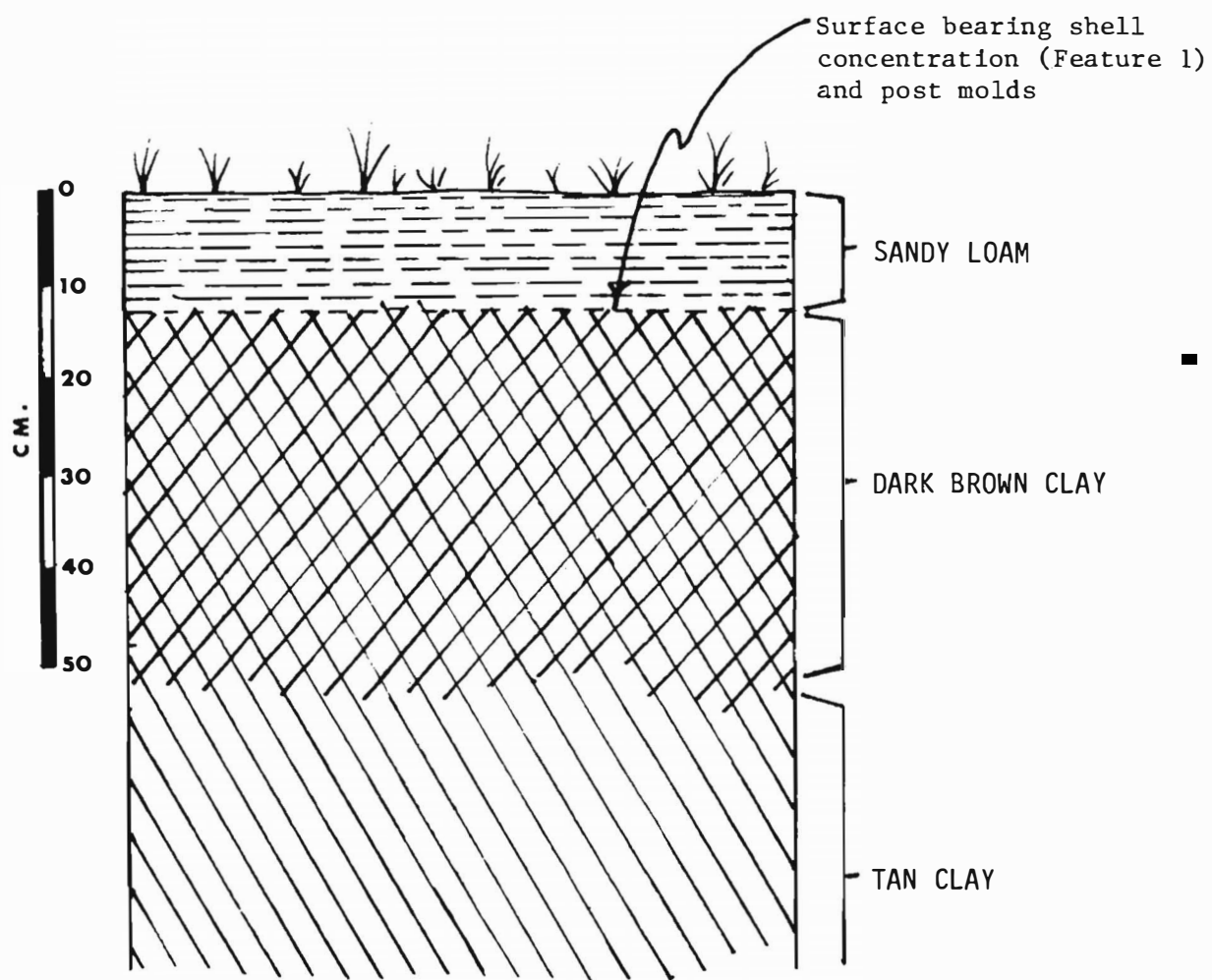


Figure 3. Characteristic Soil Profile of the Means Site

tural artifacts from surface contexts indicate occupations spanning several millenia, it is not unlikely that this uppermost loam soil zone represents alternating episodes of soil deflation and accretion upon the clay surface over a correspondingly long period of time.

#### SURFACE INSPECTION: FINDINGS

Surface examination of the site readily revealed that the site has been heavily impacted both by cultivation and erosion. Also evident, as stated, was the fact that the by far densest accumulation of **Rangia flexuosa** shell was in the western portion of the site, within an area of approximately 80 x 40 meters. It should be noted that the species **Rangia cuneata** was not present on the site. The marine shells recovered consisted of only a small handful of Oyster (**Crassostrea virginica**) and Whelk (**Busycon perversum**) fragments. Bone material found during surface inspection consists of a few small splinters of deer or deer-sized species.

Lithic artifacts recovered from surface contexts consist of the following:

#### Projectile Points

##### Dart points:

<b>Tortugas</b>	5
<b>Matamoros</b>	5
<b>Catan</b>	2
<b>Abasolo</b>	1
<b>Desmuke</b>	1
<b>Refugio</b>	1
<b>Ensor</b>	1
<b>Frio</b>	1
<b>Darl</b>	1
<b>Nolan</b>	1
<b>Early Stemmed</b>	1
Untyped	1
Fragmentary	
Medial fragment	1
Distal fragment	6

##### Arrow point

<b>Fresno</b>	1
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#### Other lithics

Preforms	6
Large thin bifaces (knives?)	2
Gouge-like tools	
Small bifacial (similar to	
<b>Olmos</b> bifaces)	3
Unifacial	1
Perforator or Drill (reworked point)	1
Thick bifacial cores	5
Utilized flakes	
Scrapers	7
"spokeshave" or "notches"	7
indeterminable function due to	
minimal utilization	19

Other Lithics (Continued)

Non-utilized flakes	
cortex	40 ( 17.4%)
secondary cortex	58 ( 24.5%)
interior	77 ( 33.7%)
interior with cortex platform	36 ( 15.7%)
thinning (lipped)	20 ( 8.7%)
Total non-utilized flakes	232 (100.0%)
Flake fragments	159
Hammerstone (purple quartzite)	■
Thin sandstone slab fragments (possible abraders)	2

(Types are as described in Suhm and Jelks 1962 and in Turner and Hester 1985.)

The projectile point sample listed above is, though small, characteristic of Archaic sites in the area, both in the specific types present and in the diversity of types. The predominance of unstemmed forms is in accord with Corbin's observation that sites located in the Coastal Bend region south of the Nueces River/Corpus Christi Bay system are characterized by triangular and subtriangular unstemmed forms (Corbin 1974:37).

The debitage sample indicates that the material used in lithic tool manufacture was, almost exclusively, rather small chert cobbles. The nearest presently known source for such material is the gravel bed reported by C. K. Chandler (1984) located on the banks of the Nueces River some 20 km upstream from the site. The high incidence of cortex, secondary cortex and cortex platform flakes in the sample is a reflection of the small size of the cobbles, though very small interior flakes may have sometimes been missed during surface collection.

## EXCAVATION

An uneroded area just east of the previously mentioned hedgerow was selected for subsurface testing. An initial two-meter-square test unit, designated NOEO, was excavated using a trowel scraping technique. All excavated soil was put through a 1/4-inch mesh screen. Excavation was thus accomplished through the upper sandy loam soil zone and into the underlying dark brown clay zone. All cultural material (lithic debitage, shell, small unidentifiable bone fragments and small burned clay nodules) was confined to the shallow loam, which ranged in depth from 10 to 18 cm, and to the upper two to three centimeters of the dark brown clay. Since the cultural debris in the upper surface of the clay was undistinguishable in quantity or kind from that in the overlying sandy loam, and since the clay was sterile below that level, it is unnecessary to make a distinction between materials from the two soil zones.

Artifact yield in the test unit was low, and consisted only of 60 pieces of lithic debitage. No diagnostic artifacts were found. The occurrence of two post molds, originating on the surface of the hard dark brown clay, suggested the presence of the remains of an aboriginal structure. Excavation was thus extended horizontally to determine whether or not additional post molds were present at this locus. The final configuration of the excavation, which encompassed 20 square meters, may be seen in Figure 4.

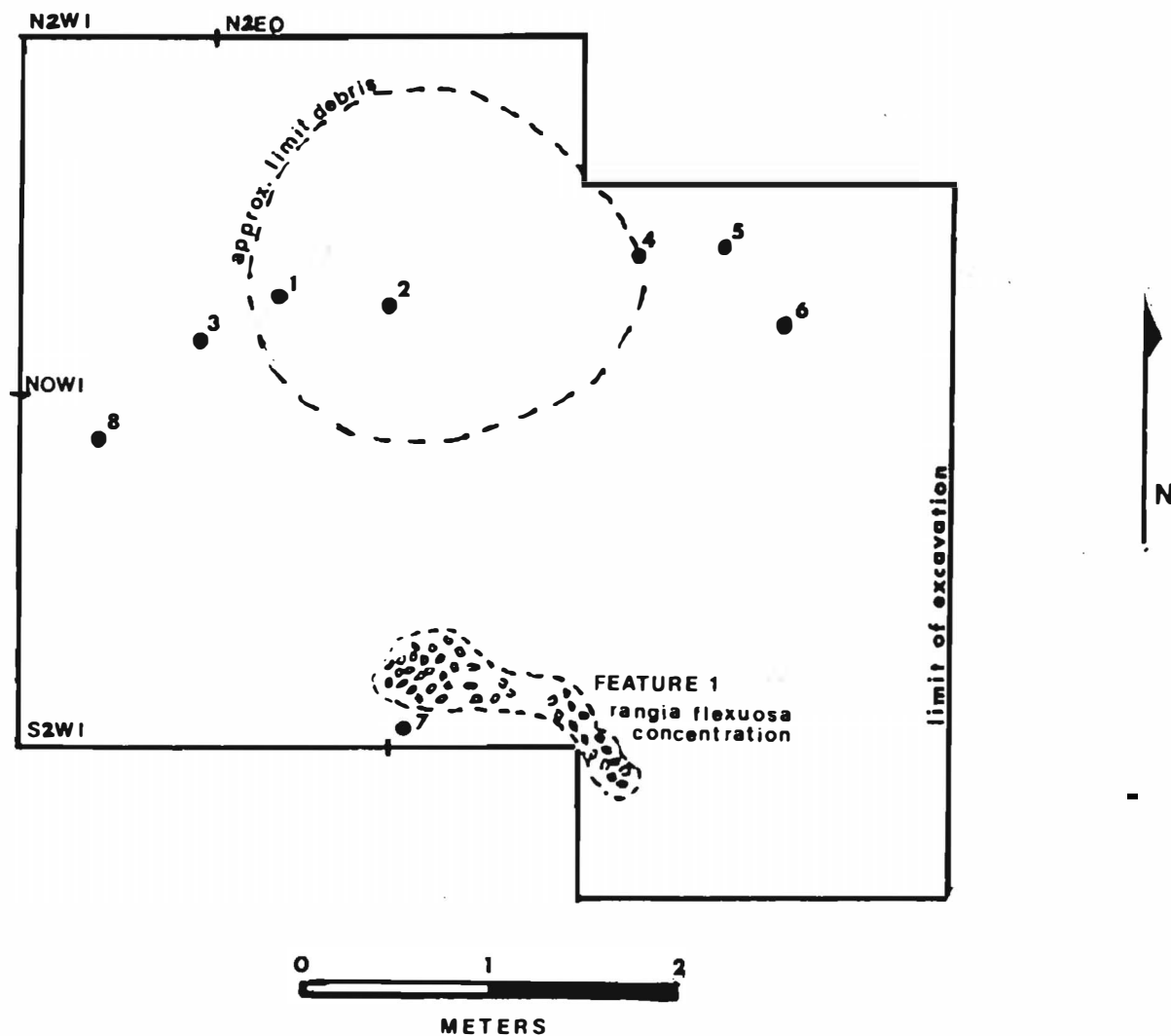



Figure 4. Map of Excavation of the Means Site Showing Locations of Debris and Shell Concentrations and Post Molds on Surface of Buried Dark Clay Zone.

### Post Molds

Excavation to the surface of the dark brown clay zone revealed a total of 8 post molds. Upon careful troweling of the clay surface, these appeared as circular spots, 7-10 cm in diameter, of grayish-brown soil against the darker brown clay matrix. Fill of these features was consistently an homogeneous and compact but relatively soft brown soil, powdery when dry, which contrasted markedly in texture with the hard, dense clay matrix. A combination of careful scooping out of fill and cross-sectioning revealed these features to be consistently conical in profile (see Figure 5). Depth of the molds ranged from 10 to 18 cm. Dimensions of the post molds, as they were numbered in the field, were as follows:

<u>Field No.</u>	<u>Diameter</u>	
1	8 cm	10 cm
2	8 cm	18 cm
3	7.5 cm	9 cm
4	7 cm	10 cm
5	7 cm	12 cm
6	7 cm	12 cm
7	7 cm	10 cm
8	7 cm	9 cm

The horizontal location of the post molds may be seen in Figure 4. Seven of the 8 molds form a roughly arc-like pattern measuring 3.8 meters from end to end (east-west). This pattern very likely represents a semi-circular structure which served to shelter a small group of people, perhaps not unlike historically documented shelters built by the aboriginal inhabitants of the general southern Texas region. Campbell reports: "The limited information on houses indicates only one type, a circular, dome-shaped structure with bent-pole framework covered by mats" (Campbell and Campbell 1981:34).

The eighth post mold in the group, located over two meters to the south of the others, may or may not be related structurally. It seems at least possible that some of the posts in the arc, probably thin, flexible saplings, judging from the diameters of the post molds, may have been bent over and secured to this lone post, thus creating a roof framework. A conjectural reconstruction of such a structure may be seen in Figure 6.

### Debris Concentration

As indicated in Figure 6, a relative concentration of camp debris (**Ran-**  
**gia flexuosa** fragments, **Rabdotus** shell, small burned clay nodules and chert debitage) was encountered along the central portion of the post mold arc, both in the thin loam soil zone and embedded in the surface of the underlying dark clay zone. Though such debris was very sparsely scattered throughout the excavated area, it was considerably more abundant within the area indicated by the dotted line in Figure 4. The dotted line may be taken only as an approximation, since the relative concentration of debris exhibited no definable edges, but a fading out in all directions. It is possible that this debris concentration is associated with the proposed simple structure, camp refuse having been pushed or swept to the back of, and behind, the sheltered area.

It will be seen from an examination of the excavation map, Figure 4, that the debris concentration is confined largely to (and nearly fills) the initial 2-meter square test unit, NOEO. Thus the relative density of cultural refuse encountered within the concentration may be approximately quantified of



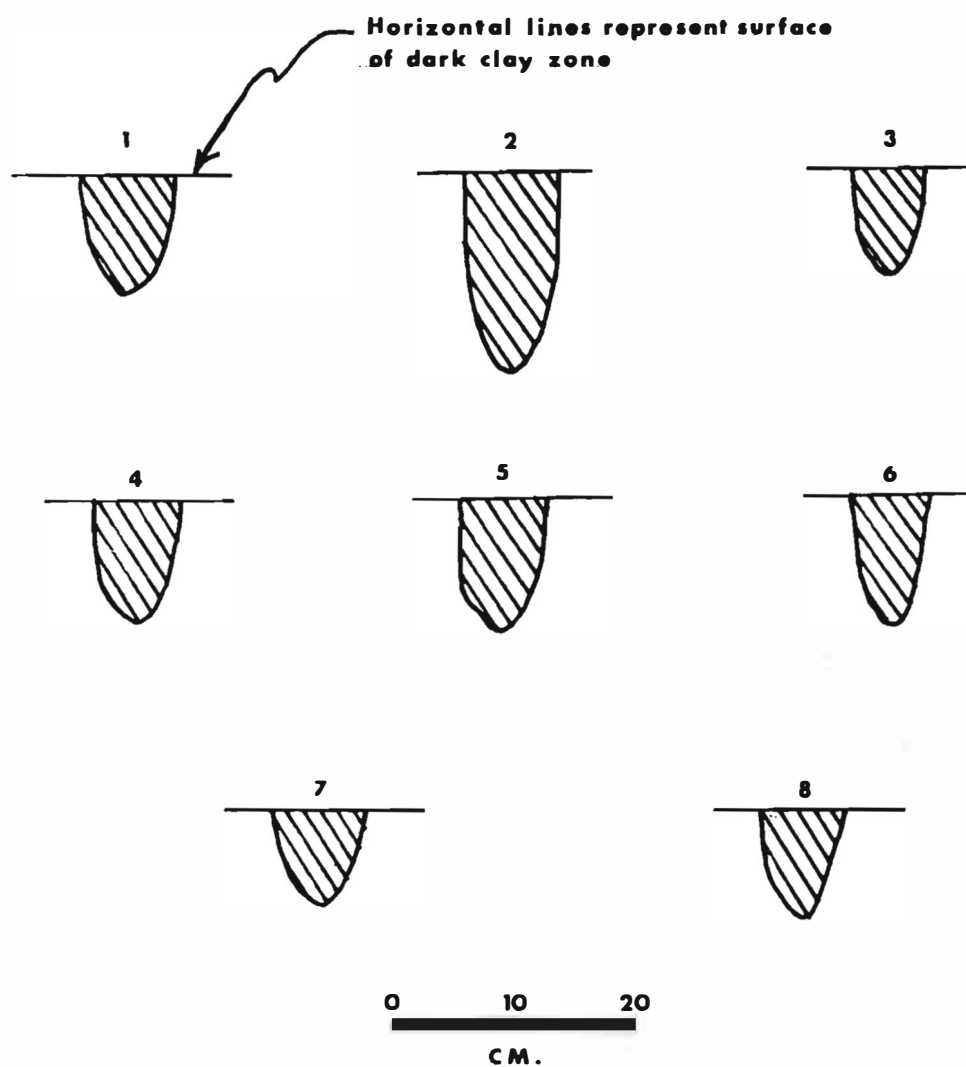


Figure 5. Post Mold Profiles of the Means Site.

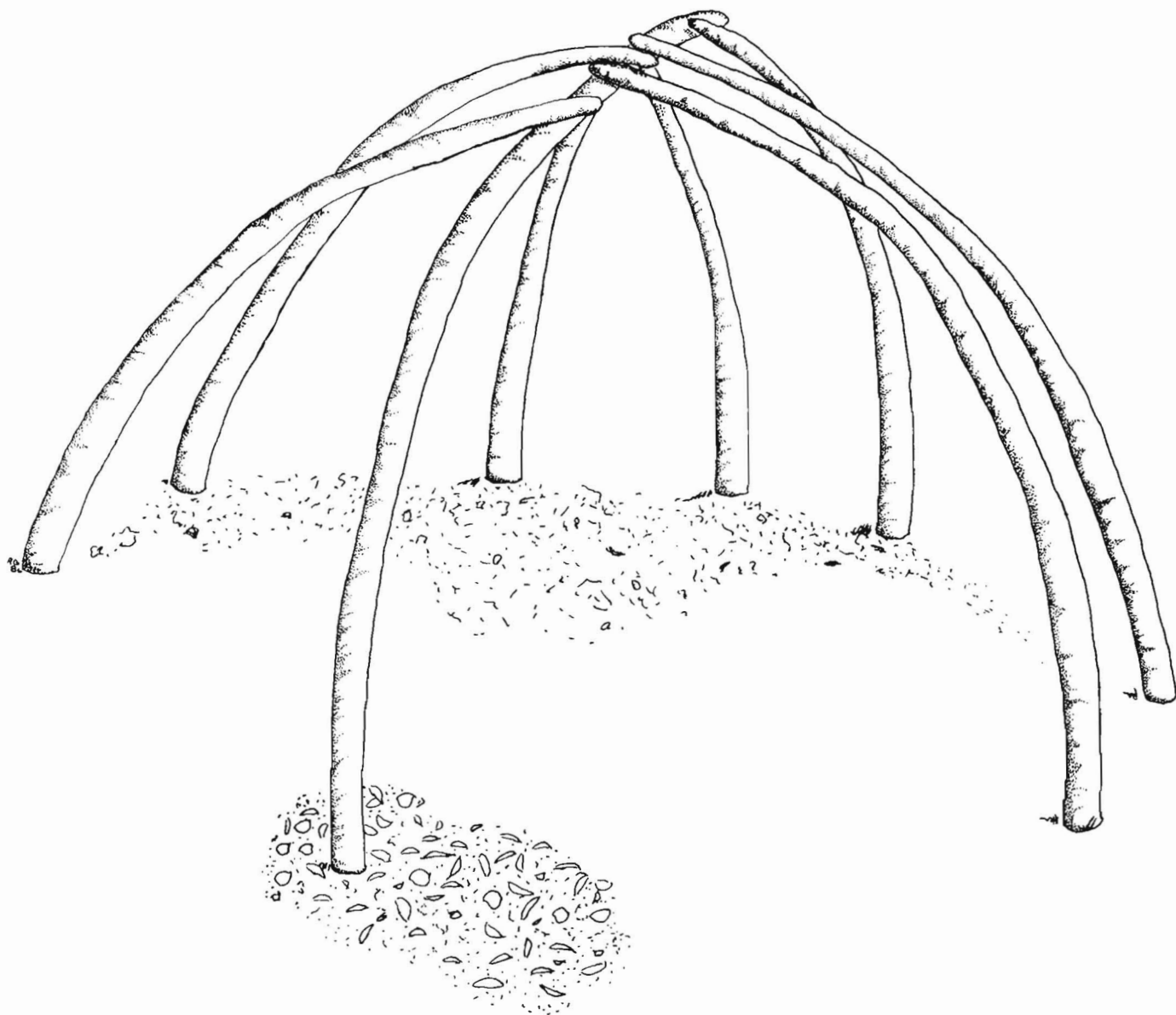


Figure 6. Conjectural Reconstructed View of the Means Site Structure (based on post mold pattern and ethnohistoric accounts).

debris encountered within the excavated area which occurred in unit NOEO. The percentages, by refuse categories, are as follows:

<u>Debris Category</u>	<u>No. of Specimens in Total Excavation</u>	<u>No. of Specimens and % of Total in Unit</u>
		<u>NOEO</u>
Chert Debitage	81	60 (74%)
Burned Clay Nodules	95	44 (46%)
<b>Rangia flexuosa</b> (valves and Umbos)	78	21 (27%)
<b>Rabdotus</b> land snails (whole)	64	18 (28%)
Small bone fragments (species unidentifiable)	24	6 (25%)

Since unit NOEO constituted 20% of the excavated area, it is apparent that the quantities of **Rangia flexuosa**, **Rabdotus** land snails and small unidentifiable bone fragments in the unit are only slightly greater than in the excavation as a whole. The debris concentration is thus characterized primarily by significantly higher quantities of chert debitage and burned clay nodules.

#### Shell Accumulation (Feature 1)

Feature 1 was a clearly definable concentration of **Rangia flexuosa** clam shells. The feature consisted of 60 complete and numerous broken valves of **Rangia flexuosa**, and also contained six whole and numerous fragments of **Rabdotus** land snail. The shells lay directly on the surface of the dark brown clay. The feature was elliptical in plan, measuring 120 cm east-west and a maximum of 80 cm north-south. Maximum thickness was seven centimeters.

It is possible, though not demonstrable, that this feature is associated with the proposed structure, perhaps representing an accumulation of meal remains immediately adjacent to the sheltered area (see Figure 4).

#### Fish Remains

The only fish remains recovered during excavation was a single fragmentary otolith from a sea trout (**Cynoscion nebulosus**).

#### Radiocarbon Date

A sample of **Rangia flexuosa** shells from Feature 1 was submitted for radiocarbon dating to the Radiocarbon Laboratory, Balcones Research Center, The University of Texas at Austin. The resultant date (S. Valastro, personal communication) (Tx-5303) is  $4390 \pm 70$  B.P., which corrects, by dendrochronological calibration, to  $5080 \pm 70$  B.P. Aten (1983:Appendix 1) gives a detailed discussion of the general validity of radiocarbon age determinations obtained from samples of **Rangia cuneata** on the Upper Texas Coast. Based on paired **Rangia cuneata**/charcoal samples, Aten concluded that **Rangia cuneata** will yield reasonably accurate dates, though they may be somewhat older than dates from charcoal in the same contexts. Salvatore Valastro (personal communication) of the Radiocarbon Laboratory, Balcones Research Center, the University of Texas at Austin, has stated that **Rangia flexuosa** should produce similar results. Dendrochronological calibration is that presented by Kline, et al. (1984).

## INTERPRETIVE DISCUSSION

It is clear that the Means Site was occupied primarily during the long-lived Archaic Stage, since, with the exception of the single **Fresno** arrow point, all recovered projectile points appear to be Archaic dart point forms. The range of types present suggests that the site saw repeated occupation over a long time span: The **Early Stemmed** type, for example, has been assigned to a relatively early time period based on apparent association with **Colondrina** points at the Devil's Mouth Site in Val Verde County (Turner and Hester 1985:85), while **Ensor** and **Frio** points are assigned to the Late Archaic based on chronological evidence from Central Texas (ibid.; Prewitt 1981). **Tortugas** points appear to pertain to the Middle Archaic (Turner and Hester 1985), while **Matamoras** and **Catan** points are referred to the Late Archaic (ibid.; see this report's Figures 7, 8 and 9). That the site was recurrently occupied over a long temporal span is not surprising in view of its ecotonal location; resources from both the Nueces estuary and the adjacent upland prairies would have been readily available to the various hunter-gatherer groups inhabiting the site.

While no chronologically diagnostic artifacts were recovered from the excavation units, we have the corrected radiocarbon age determination of 5080  $\pm$ 70 B.P. Since the shell cluster from which the date was obtained rested upon the same clay surface that produced the post mold pattern and on which also rested the apparently associated scatter of camp debris, it is likely that the shell sample dates the inferred structure. While this must remain conjectural, such an interpretation is also supported by the horizontal distribution of these features: as already suggested, the discrete cluster of shells immediately adjacent to and in front of the sheltered area is an expectable spatial arrangement in which the shells represent meal remains associated with occupation of the shelter.

Since we have only the one radiocarbon date, its reliability may be questionable; ideally, a series of such would be desirable. Also, the absence of diagnostics from the excavation precludes supportive artifactual evidence for the approximate date of occupation. Other data recently recovered along the southern margin of the lower Nueces estuary, however, appear to indirectly support the ca. 5000 B.P. age determination.

As indicated above, the western portion of the Means Site is characterized by a dense spread of shells of the species **Rangia flexuosa**. **Rangia cuneata** is entirely absent, as was this species from the shell cluster, Feature 1. A similar **Rangia flexuosa** midden was partially excavated at the McKinzie Site (41 NU 221), located a few kilometers downstream (Ricklis 1986). The McKinzie Site midden was defined as a vertically discrete stratum, 10-15 cm thick, lying at the interface of that site's sandy clay loam topsoil and the underlying light tan Pleistocene clay. Three samples of **Rangia flexuosa** from this stratum, labelled Zone III, were submitted to the Radiocarbon Laboratory, Balcones Research Center, The University of Texas at Austin. The resultant dates, dendrochronologically corrected, were as follows (S. Valastro, personal communication):

Tx-5263	5220 $\pm$ 90 B.P.
Tx-5264	5310 $\pm$ 90 B.P.
Tx-5265	5130 $\pm$ 90 B.P.

The occurrence of a **Bell** type dart point in the Zone III stratum tends to support these C-14 determinations. Prewitt has placed this point type chronologically at ca. 6000-5000 B.P. in Central Texas (Prewitt 1981).

Superior zones at McKinzie, excavated in arbitrary 10-cm levels, yielded progressively diminishing percentages of **Rangia flexuosa** as opposed to **Rangia cuneata**, such that the percentages of **flexuosa** dropped from 100.0% in Zone III

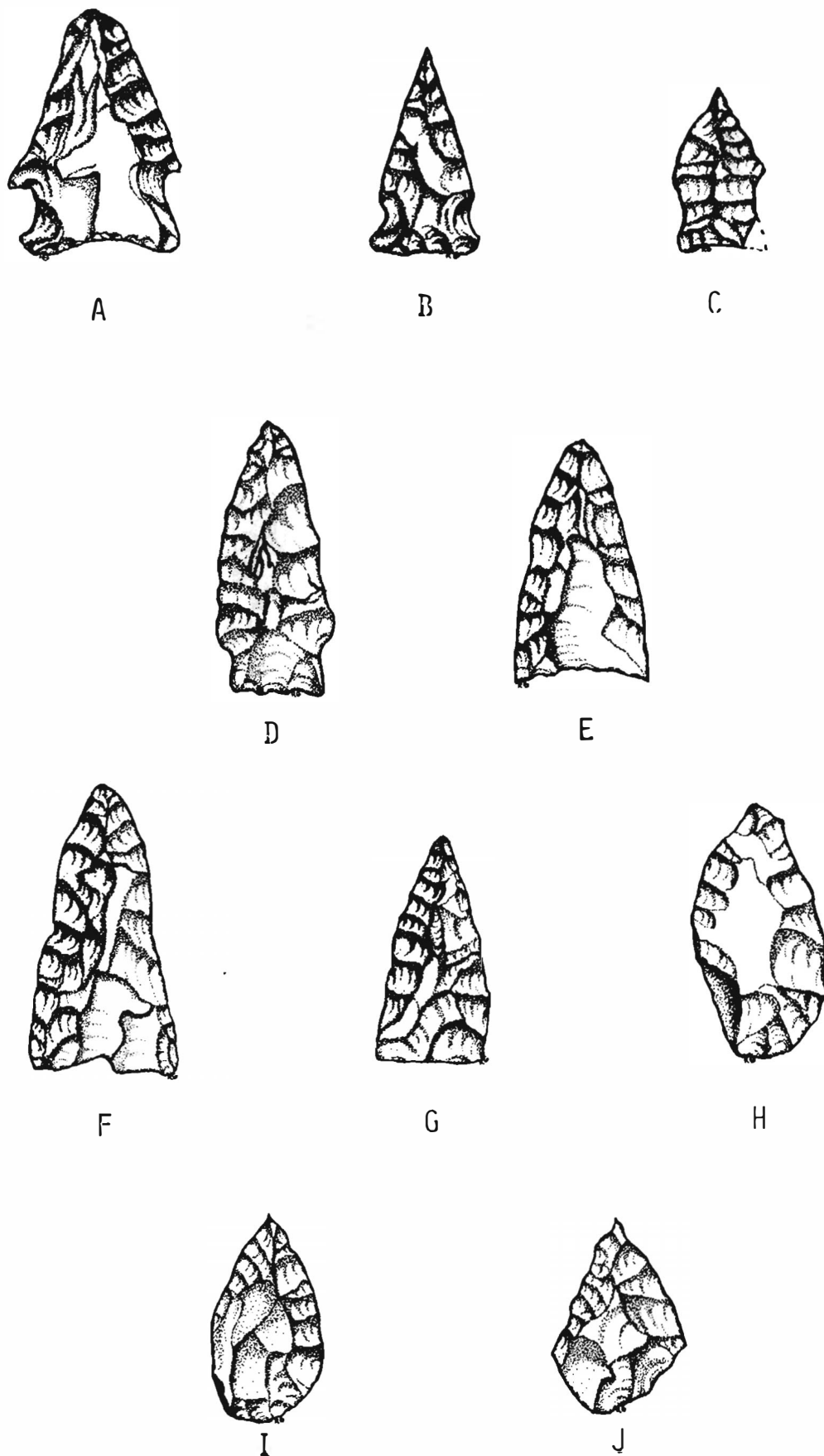


Figure 7. Projectile Points from the Means Site. A, **Frio**; B, **Ensor**; C, Transitional (?); D, Late **Darl**; E-F, **Tortugas**; G, **Matamoros**; H-I, **Catan**; J, **Desmuke**.

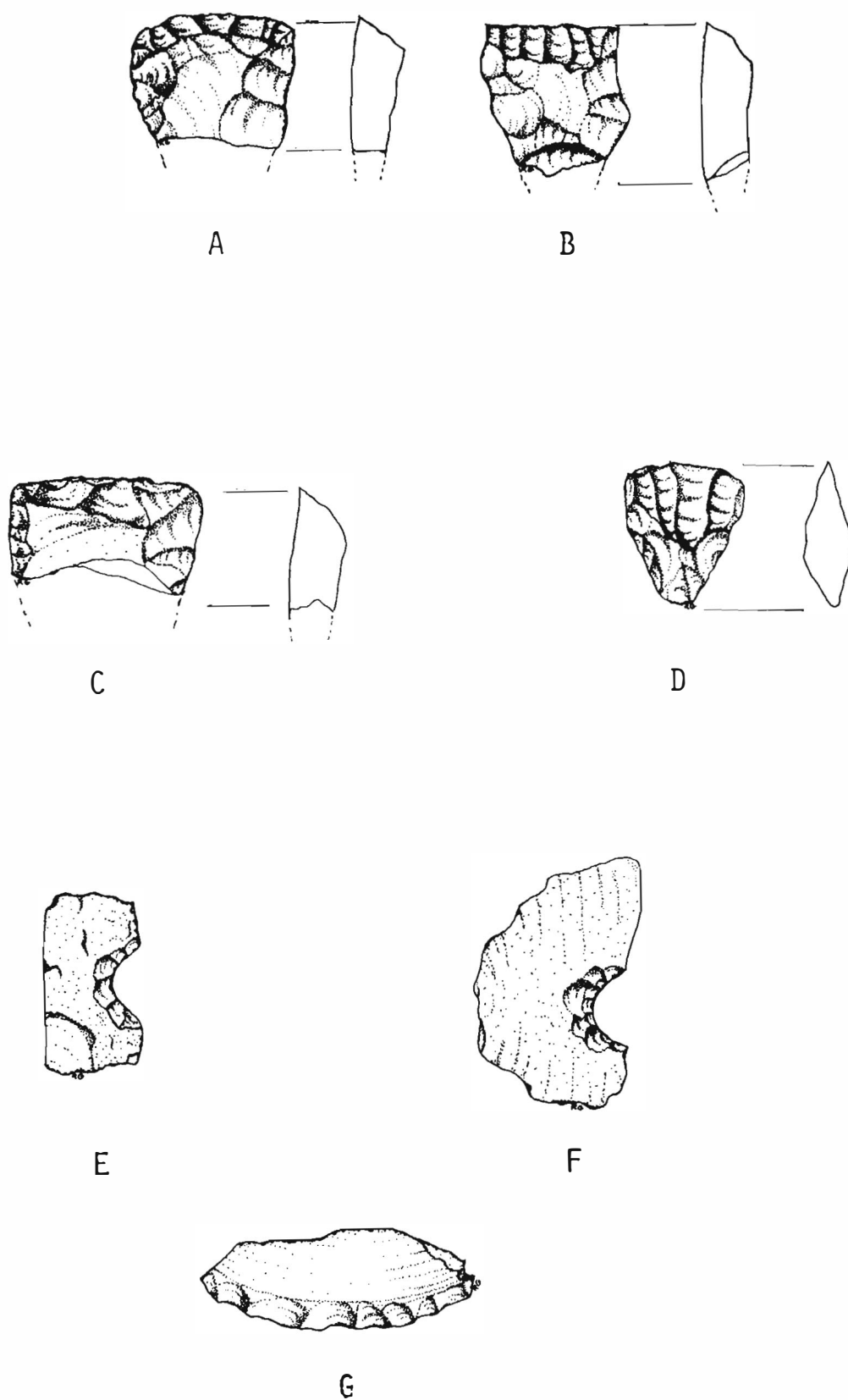


Figure 8. Other Artifacts from the Means Site. A-C, Unifacial tools (gouges); D, Small bifacial tool (**Olmos** biface); E-F, Notched or Spokeshave scrapers; G, Small shell scraper.

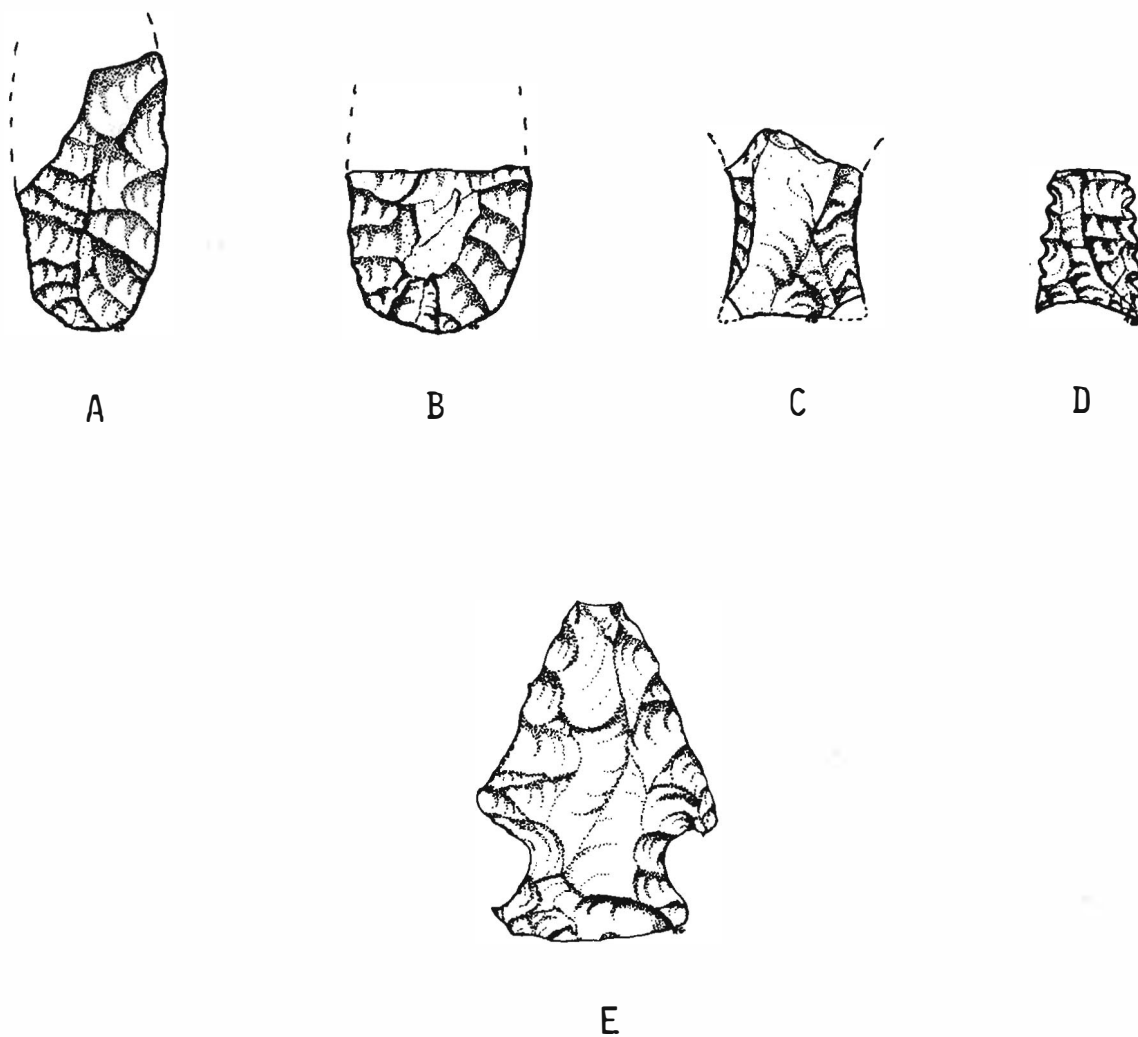


Figure 9. Additional Bifaces from the Means Site. A, **Refugio**; B, **Abosolo**; C, **Nolan** stem; D, Serrated **Fresno** arrow point; E, possible **Early-Stemmed** point.

to 27% in the topmost 10-cm level (characterized by the presence of Late Prehistoric materials such as arrow points and Rockport Ware pottery (Ricklis 1986:75)).

While both *Rangia flexuosa* and *Rangia cuneata* are brackish water estuarine clams, *flexuosa* is known to prefer a higher salinity level than does *cuneata* (Andrews 1977:220-221). Thus it appears that the gradual shift in percentages of *Rangia flexuosa* as opposed to *Rangia cuneata* at McKinzie reflects decreasing salinity in the estuarine waters near the site. That this trend was occurring throughout the area is suggested by evidence from other sites. At the Jackson Woods Site, located approximately one kilometer upstream from McKinzie, a Late Prehistoric component produced exclusively *Rangia cuneata*; an Archaic component on the site was characterized by the presence of exclusively *Rangia flexuosa* (Ricklis 1986:100). Arbitrary levels in a test excavation at the nearby Allison Site, productive of Later Prehistoric Rockport potsherds, yielded only *Rangia cuneata* (Carlson, Steele and Bruno 1983:Figures 15 and 16).

While data of this kind from the area are still limited, it appears from the above that Late Prehistoric components produce primarily or exclusively *Rangia cuneata* clam shells, while earlier components, assignable to the Archaic stage are characterized by *Rangia flexuosa*. The inference to be drawn is that the gradually changing salinity in the Nueces estuary indicated by the data from the McKinzie Site was a process occurring throughout the area. The trend over several millenia toward decreasing estuarine salinity may appear to contradict the general paleoclimatic evidence for Texas, which indicates gradually drier conditions during the Holocene (Bryant and Shafer 1977), a trend which would have resulted in gradually decreasing discharge of fresh water into coastal estuaries and a concomitant increase in salinity. Geological evidence, however, presents a coherent picture which agrees with the archaeological data. It has been inferred that by ca. 4500 B.P. the lower Nueces valley was inundated with estuarine waters to a point west of present Calallen, Texas, as the result of relatively rapid sea level rise during the mid-Holocene (Brown, et al. 1976:21). Thus a long embayment was created, and since the present barrier islands had, at that time, not yet formed, this embayment was susceptible to tidal influence from the open Gulf. Salinity levels would have thus been relatively high. With the gradual formation of the barrier islands, the Nueces estuary was cut off from this tidal influence and salinity levels would have become progressively lower, producing an aquatic environment more suitable to the establishment of extensive *Rangia cuneata* populations. The fact, then, that the *Rangia* clam shell middens at both Means and McKinzie contain exclusively *Rangia flexuosa*, and that samples of these shells from both sites have been dated to ca. 5000 B.P. is in accord with the geological evidence for the end of the mid-Holocene period. The components associated with the creation of dense *Rangia flexuosa* deposits at both sites may thus be inferred to represent adaptations to an estuary bayshore environment during this time period.

#### CONCLUDING REMARKS

1. The Means Site, due to its ecotonal location between the lower Nueces estuary and the flat upland prairie to the south of the floodplain, provided the prehistoric groups which occupied the site with access to a wide range of aquatic and terrestrial resources. The overwhelming predominance of Archaic dart points in the projectile point sample, and the specific point types present, indicate recurrent occupation of the site over the millenia of the South Texas Archaic. The radiocarbon date of ca. 5000 B.P. obtained on a sample of *Rangia flexuosa* shells, in conjunction with the archaeological and geological evidence discussed above, suggest that the profusion of *Rangia flexuosa* shells at the site represents relatively intensive use of the location at that time.



2. A small structure, indicated by an arc-like post mold pattern, and an apparently associated scatter of cultural debris, was located in the excavation. Since the dated shell sample rested at the level at which the post molds originated, it is possible that this structure dates to ca. 5000 B.P. This inference, though perhaps supported by the horizontal location of the dated shell cluster, must remain conjectural. Because of the shallow depth of the buried surface on which these various features occurred, their association must remain open to question. The lensed nature of the overlying thin layer of brown loam suggests eolian deposition onto what may have been a clay surface subjected to alternating episodes of exposure through deflation and eolian reburial. The surface which saw the deposition of the *Rangia flexuosa* cluster could have been, therefore, the same surface on which the small structure was erected at some later date. The overwhelming predominance of Archaic point types from the site in general, however, does strongly suggest that the structure was built and used some time during the Archaic.

3. The post mold pattern reported here is, to our knowledge, the first recognized in South Texas. This find indicates that we should avoid the assumption that due to their presumably mobile lifeways, the aboriginal inhabitants of the region did not erect structures sufficiently substantial to have left traces directly susceptible to archaeological discovery. Because of the importance of structural evidence in reconstructing the social aspects of prehistoric cultural systems, we suggest that archaeological work in the region should include careful search for post mold patterns which might be associated with occupational surfaces.

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CONSTITUTION AND BY-LAWS  
OF  
THE SOUTHERN TEXAS ARCHAEOLOGICAL ASSOCIATION  
(as amended April 19, 1980)

Article I

The name of this "Association" shall be:  
"The Southern Texas Archaeological Association."

Article II

- (a) The purpose of this Association shall be to bring together persons with an active interest in the archaeology and prehistoric heritage of Southern Texas in an atmosphere conducive to the exchange of information and ideas;
- (b) To promote scientific archaeological investigation and documentation;
- (c) To preserve the archaeological materials and records of the region;
- (d) and to interpret and publish data attendant thereto.

Article III

- (a) Membership shall be extended to all persons who are in agreement with the purposes of the Association and by payment of the prescribed annual dues.
- (b) All members shall agree to abide by the following statement of ethics:  
"I pledge that I will not intentionally violate the terms and conditions of any Texas Antiquities Statutes, as same now exist, or shall be hereafter amended or enacted, or engage in the practice of buying or selling artifacts for commercial purposes or engage in the willful destruction or distortion of archaeological data or disregard proper archaeological field techniques."
- (c) Meetings shall be held four times per year at a location designated by the Board of Directors, and the Board of Directors will be empowered to call special meetings when necessary.

Article IV

The government of the Association shall be vested in a Board of Directors consisting of the following officers: Chairman, Vice-Chairman, Secretary, Treasurer, Newsletter Editor and Program Chairman; and the Immediate Past Chairman as well as additional Board members consisting of the chairmen of appointed committees in existence at the time of any regular or special meeting.

A Nominating Committee shall be appointed by the Chairman not less than thirty days prior to the annual business meeting.

Article V

The officers shall be elected by popular vote annually and will serve for one year. The first meeting of the calendar year will be the annual business meeting, at which time officers will be elected and take

office. In the event any of the Directors cannot serve after elected, the Board will appoint a member to serve the remaining term of office.

#### Article VI

This Constitution and By-Laws may be amended by a majority vote of the members present at any business meeting, provided the membership has been notified at least thirty days prior to the meeting of intention to amend and the nature of the proposed amendment.

### BY-LAWS

#### Article I

Memberships will be as follows:

Supporting	\$ 30.00
Contributing	15.00
Active	7.50
High School Student	3.00
Family	15.00
Institutional	7.50

Dues are payable any time, but if not paid before January 1 of the following year, will be considered delinquent. Delinquent members will not be permitted to participate in Association activities.

#### Article II

Officers must be members in good standing.

#### Article III

- (a) Expenses of the Association will be delineated in an annual budget which will be approved by the Board.
- (b) The Chairman shall not authorize any non-budgeted expenditure in excess of \$50.00 without approval of the Board.

#### Article IV

The Chairman will appoint committees at such time that committees are deemed necessary. All committees appointed by the Chairman shall cease to exist upon the expiration of that Chairman's term of office unless specifically requested to continue their organization and purpose by the Chairman Elect.

#### Article V

Special awards may be determined by the Board.

## AUTHORS

RITA GUNTER recently retired from teaching kindergarten in Odem, Texas; she holds an M.Ed. in Early Childhood Education and an M.S. in Bilingual-Bicultural Education. She is also a state champion pistol shooter and works as a police dispatcher and constable in Annaville, Texas. She is an active member of the Texas Archeological Society, STAA, and the Coastal Bend Archeological Society, and completed several courses in archaeology at Texas A & I in Kingsville. Rita presented an oral report of the work at the Means Site at the January 1982 quarterly STAA meeting, which is further documented in this issue.

MARGARET ANN HOWARD presently is an archaeologist with Prewitt and Associates of Austin, Texas, working on contract research projects. Prior to the present state budget crisis, she was employed with the Office of the State Archeologist involved in a wide variety of activities including the Archeological Stewards program and the Coastal Bend Archaeological Palaver, which focused on defining archaeological study units and cultural management objectives. Her report in this issue is Margaret's first article for *La Tierra*, but hopefully not her last.

BOB RICKLIS is a graduate student in anthropology at the University of Texas at Austin. Much of his work to date has focused on the Texas Coastal Bend area; his masters thesis involves a report of the archaeology of the McKinzie Site near Corpus Christi. Bob is also an active member of the Coastal Bend Archeological Society and serves as Editor of its Occasional Papers series. He has archaeological field experience in several parts of the country including New York and a number of areas in Texas. Bob lives in Corpus Christi and Austin.

SOLVEIG A TURPIN received her PhD in Anthropology from the University of Texas at Austin (1982) and is presently the Associate Director of the Texas Archeological Research Laboratory (TARL). She is also a teacher and consultant in the field of computer use in archaeology. She has published several articles on Lower Pecos River archaeology with an emphasis on that region's notable rock art (including several **Plains Anthropologist** reports). Readers should watch for a forthcoming **Archaeology** magazine (Archaeological Institute of America) report on "The Ecstatic Shaman Theme of Paracas Textiles" (coauthored with Anne Paul), which is an analysis of images on ritual weavings in ancient Peru (probably the September/October 1986 issue).

## INFORMATION FOR CONTRIBUTORS

**La Tierra** publishes original papers and selected reprints of articles involving the historic and prehistoric archaeology of southern Texas and adjacent regions. Original manuscripts are preferred. Articles involving archaeological techniques, methods, and theories are also considered.

Articles may be submitted in any form, although double-spaced typed copy is naturally preferred. However, we will review and work with material in any form to encourage those not comfortable with typewritten or other formal methods; we are more concerned that you submit your ideas and document your materials than the form of materials with which we have to work.

Figure 1 of any manuscript should normally be a county or regional map to show the location of your sites. If you choose not to disclose the specific location of the site, show at least the county with its major river or creek drainages. A small Texas map showing the location of the county in Texas will be added, to provide our readers who are not familiar with the area some idea of the general location. Other figures can be line drawings or photographs; line drawings are preferred if they are good quality since every photograph used costs an extra \$55-\$60 for a metal plate and set-up charges. If you need assistance with illustrations, please let us know--there are several STAA members who have volunteered to help with illustrations. For examples of good maps and artifact illustrations, see the McReynolds article in Vol. 9, No. 4, or the C. K. Chandler article in Vol. 9, No. 3.

All figures should contain an appropriate caption and, where necessary, identification of each specimen (a, b, ... or 1, 2, ...) to aid referencing individual specimens in the text. The suggested procedure is to photocopy your original drawing and write in captions and identification letters on the photocopy. This saves the original for our use in final preparation of camera-ready copy.

Citations of references should be embodied in the text, giving the author, date, and page (e.g., Hester 1980:33). All references cited should be included in a References list using normal archaeological form (see articles in this issue for examples). Personal communications are cited in the text (e.g., Anne Fox, personal communication 1977) but need not be included in the reference list.

The main objective of this quarterly journal is to provide a way for STAA members and others interested in the archaeology of southern Texas to share the information they have with others. We encourage your full participation through submission of your information for publication; we are particularly interested in receiving manuscripts from those in the less well-known counties of our region, to document even surface finds and old collections. Only through such total member participation can we, as a group, build up a comprehensive picture of the archaeology of our area!

Be sure to indicate the author's name (or names, if more than one author) on the manuscript. Make a photocopy of the submitted material for your records before mailing to the Editor. Each author is mailed two "author copies" upon publication.

Manuscripts or other information may be submitted to: Jim Mitchell, Editor, **La Tierra**, 926 Toepperwein Road, Converse, Texas 78109. Let me hear from you soon.

## 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 amateur 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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