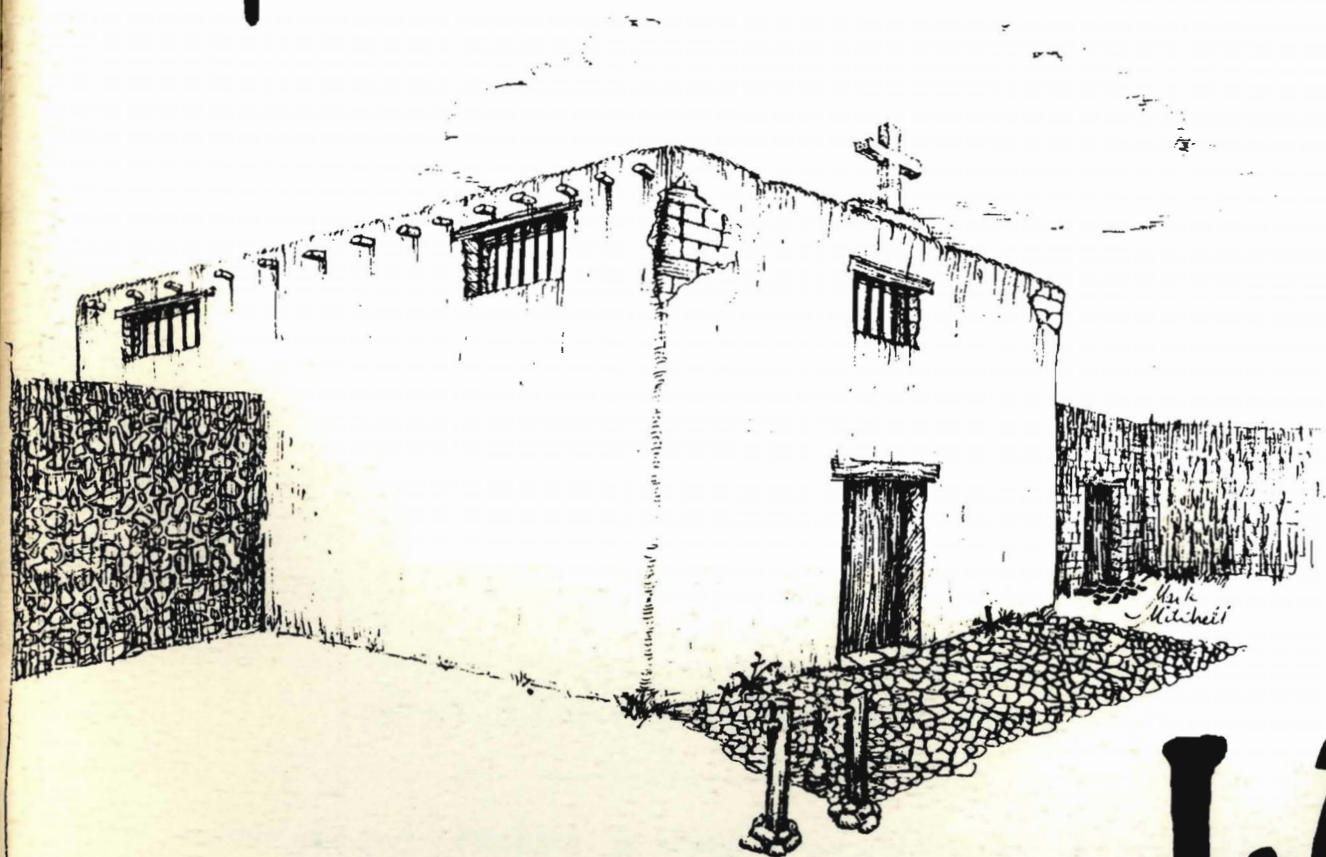


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Jimmy L. Mitchell
Editor

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HISTORIC INDIAN GROUPS OF THE CHOKE CANYON
RESERVOIR AND SURROUNDING AREA, SOUTHERN TEXAS

T. N. Campbell and T. J. Campbell

This just published, eighty-page report for the Center for Archaeological Research of the University of Texas at San Antonio is Volume 1 in a planned nine volume series of the Choke Canyon Dam Project. It is a fitting introduction to the series in that it reexamines the ethnohistoric materials available for the area, and synthesizes previously unreported material into a coherent, very readable discussion. It is surprising that so much new information, and so many corrections to previously published information, can still be developed; indeed, the Campbells have demonstrated that the potential of the ethnohistoric literature has not yet been realized in any significant way. Their report is the first step toward what eventually may be realized from unrecognized sources.

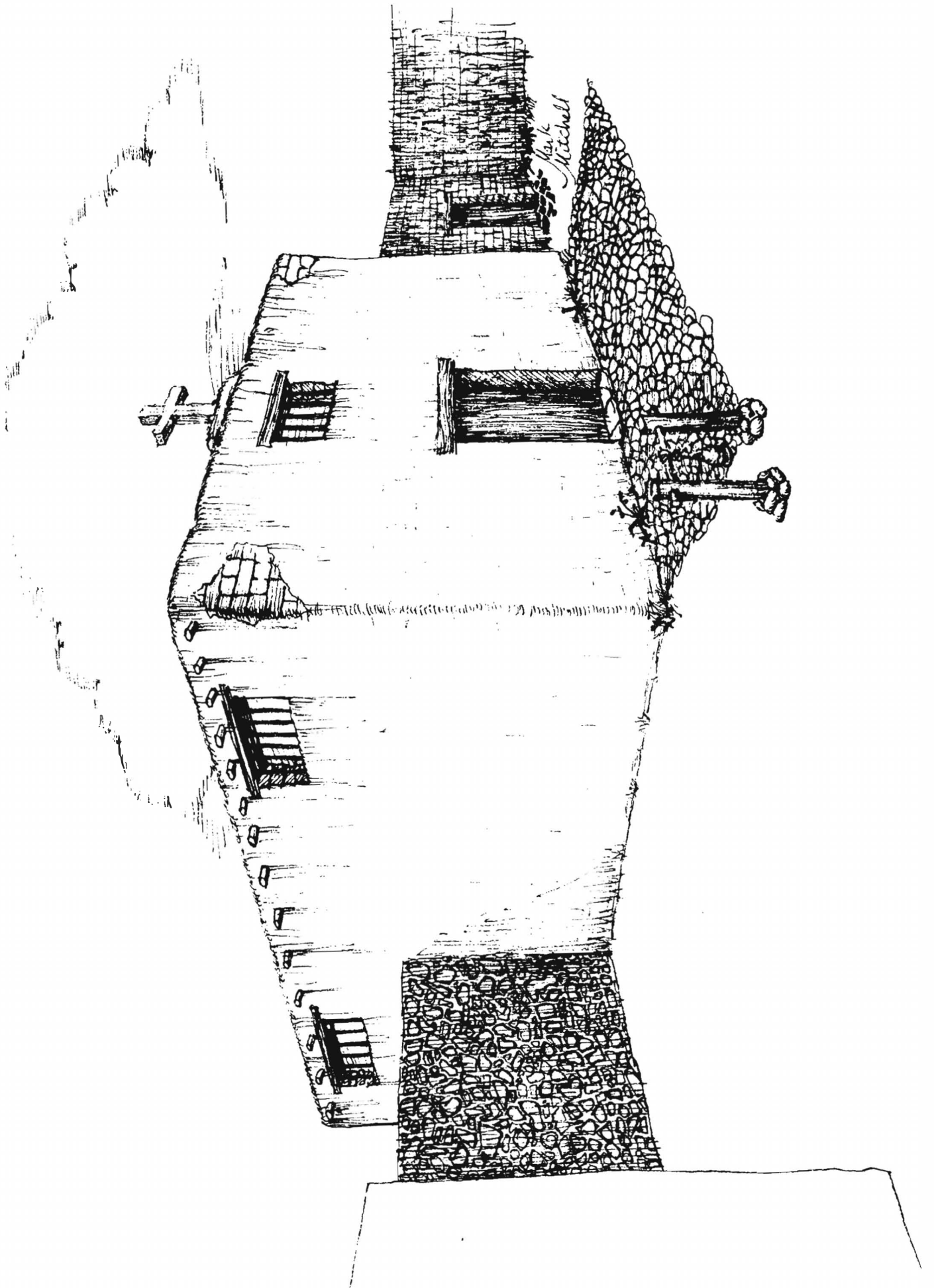
Perhaps the most fascinating (and controversial) aspect of this volume is the authors' reopening of the issue of Cabeza de Vaca's route in Southern Texas. By careful study of several published sources and by a very methodical examination of de Vaca's description of both the land and the peoples, the Campbells develop a very good case for a more southern route through the area than has been supposed. Their arguments are highly rational and very believable; however, they are almost certain to also be controversial. We can expect that the "last word" has not yet been published about poor Cabeza de Vaca's wanderings....

The main substance of this volume, however, is in the descriptions of the various local groups in the Guadalupe River area, coastal margin between the Guadalupe and the Nueces Rivers, in the Three Rivers area, and in the Rio Grande Valley between Laredo and Rio Grande City. The authors have synthesized and evaluated a great deal of information about the various groups in these areas and come to some interesting and fascinating conclusions about the languages, customs, and behaviors of these groups. These data alone would have made this one of the more significant works in the ethnohistory of Southern Texas to be published in several decades. However, by their careful scholarship and very rational approach to developing ethnohistoric information, the Campbells have also made this one of the most interesting volumes ever to be published by the Center for Archaeological Research (including both ethnohistory and archaeology)!

A close review of this volume failed to reveal many editorial or typing glitches. The only error of any significance located was on page 22 (last paragraph) in a discussion of the 1708 Espinosa record; it is said to be a list of Indian groups living west of the Guerrero missions. However, it is clear from the context that this list refers to groups in Southern Texas and thus would be east of Guerrero.

Overall, this is an exceptional and a very valuable piece of scholarship. It is a work which will be often referenced, and it makes a very appropriate beginning to the Choke Canyon Series. I highly commend it for your reading.

The Editor



A REVIEW OF THE HISTORY AND ARCHAEOLOGY OF MISSION SAN LORENZO,
REAL COUNTY, SOUTHERN TEXAS

Paul J. Cook

INTRODUCTION

Mission San Lorenzo de la Santa Cruz was unique among Spanish colonial missions in several ways. It was the main mission established in Southern Texas for the Lipan Apaches, and its establishment did not follow official procedures for approval. It was a very short-lived venture, lasting only nine years. And it failed in its objectives of bringing Christianity to an otherwise neglected tribe of natives and gaining an ally in the military struggle with the emerging coalition of Comanche, Tejas and Wichita-speaking groups, with the French. Even though Mission San Lorenzo played only a minor role compared to the more well-known missions of Southern and Central Texas, its history does help to further our understanding of early Spanish frontier life, and offers a unique look at missionized Lipan Apache Indians.

HISTORY

Apache Indians invaded the Southern Plains of Kansas, Oklahoma, New Mexico, and Texas from the north some time prior to the first arrival of the Spanish. Coronado met groups thought to be Athapaskan-speaking Apache in Eastern New Mexico and the Texas Panhandle in 1540. Recent archaeological work suggests that Apache arrived on the Llano Estacado about 1525 and radiocarbon dates associated with *Garza* arrow points probably reflect Apache presence in the Lubbock area round A.D. 1635 and A.D. 1665 (Johnson, et al. 1977:164). With the availability of horses from the several Spanish expeditions through the area, the Apache became a highly mobile force thrusting into Southern Texas and Northern Mexico. The threat of Apache raids was a major factor in the success of mission efforts in the region; the missions were a refuge of last resort from Apache raids for many South Texas native Indian groups (Clark 1980:3). Ironically, with the coming of the Comanche into Texas around A.D. 1700, the Apache themselves became the target of raids and some were separated from other Apache groups, becoming somewhat isolated in deep Southern Texas. It was in this period that such Apache groups came to be known collectively as Lipan, although they were probably a number of unrelated groups previously.

Relations between the Lipan Apache and the Spanish during the 1700s were constantly strained. Periods of peace sometimes interrupted the hostilities, but for the most part, life was typically a struggle with the Apache raiding the Spanish settlements, particularly in the San Antonio area, and the Spanish pursuing the Apache to seek military victory (and to promote the slave trade). Some attempts were made to mediate this way of life but usually failed due to the ongoing quest for revenge by both sides. As early as 1743, Father Santa Ana of Mission Concepción petitioned the viceroy to attempt peace with the Apache and establish a *presidio* in their territory (Newcomb 1969).

This petition and others were left unanswered because of continued raids. In 1749, however, 167 Apache were captured by the Spanish, and were held hostage in San Antonio. The Spanish commander offered to release these and other prisoners if the Lipans would agree to a formal peace. This led to the famous ceremony in the middle of Military Plaza where a tomahawk, along with a horse and some arrows, were literally buried. Thus was peace established between the Apache and the *presidio* garrison at San Antonio de Béxar (see Smith 1981:3; or Ramsdell 1959:103-4).

Fronticepiece. An idealized view of the Mission San Lorenzo de la Cruz, Real County, Southern Texas, by Mark A. Mitchell (adapted from the Hal Story drawing, archaeological data, and photographs of a model of the mission in Tunnell 1969).

Following the peace agreement, many Lipan Apache began migrating to the San Antonio area to take advantage of Spanish trade. They continued to petition for missions to be established for them. The Lipan groups generally camped along the Medina River southwest of San Antonio; they were perceived as a continuing threat by the mission padres and Indians, since the Lipan groups raided the mission herds for subsistence. The tense situation was further aggravated by repeated outbreaks of smallpox among the San Antonio Mission Indians in October 1749 and in July and August 1751 (Schuetz 1980:4).

Father Santa Ana and his successor, Father Dolores, wanted separate missions established for the Lipans. Through his persistence, Father Dolores was finally successful in convincing the viceroy to study the possibility of establishing Apache missions (Newcomb 1969). [Editor's Note - Some type of attempt may have been made to create a mission for the Apache in Atascosa County, south of San Antonio; some early maps of the area indicate the presence of a Spanish church in that area (Anne A. Fox, Personal Communication 1979).]

In 1753, Lieutenant Galván led a small party from San Antonio to find a site which would be suitable for an Apache Mission; Lt. Galván found a suitable site eventually, on the San Sabá River, considerably northwest of San Antonio on the Edwards Plateau (see Figure 1). Despite Lt. Galván's recommendation, a second expedition was dispatched, this one led by the Commander of the *presidio* protecting Mission San Xavier, on the San Gabriel River (Milam County, Central Texas). This expedition set out in 1754 and followed the same route as Lt. Galván's; it was met with the same encouragement and enthusiasm from the Lipans. Reports of possible mineral wealth in the San Sabá region spurred the governor to send his lieutenant governor on yet another expedition in 1756. Finally, in the fall of 1756, Colonel Don Diego Parrilla was ordered to move the San Xavier garrison to the San Sabá site (Newcomb 1969).

Through the winter, Colonel Parrilla made arrangements, and in April 1757, 400 individuals set out for the San Sabá site, where they established the Presidio de San Luis de los Amarillos.* Even though Colonel Parrilla was skeptical about the whole adventure, the missionaries, led by Father Don Pedro Terreros, were enthused and began immediate construction of a temporary mission about two miles from the *presidio*, (Mission Santa Cruz).

By May of 1757 no Lipan Apache had arrived at Mission Santa Cruz so Father Benito Varela set out to recruit residents. His journey proved unsuccessful; however, in June about 3,000 Lipans did show up at the urging of a missionary in San Antonio. These Indians did not stay, however, and soon departed on a meat hunting expedition. Throughout the summer, groups would come and go but none took up permanent residence. The missionaries became very discouraged. Father Terreros became as pessimistic as Colonel Parrilla and wrote to the viceroy about the hopelessness of the situation (*ibid.*).

The viceroy, in response to a similar letter by Colonel Parrilla, reminded the commander that his mission was to insure the success of the San Sabá mission and not to move or abandon it. With that thought in mind, the Spaniards settled in for a long unfruitful winter marred only by the theft of a herd of horses in February. The missionaries were advised of the theft and a subsequent attack on a patrol, yet they declined to abandon the mission for the safety of the *presidio*. This was a costly mistake, for on March 16, 1758, the mission was attacked and destroyed by previously peaceful Tonkawas, Bidais, and Tejas Indians as well as Comanches. Father Terreros was killed. The Indian attackers were in too great a number for the soldiers to oppose, and it was fortunate that the Indians did not attack the *presidio*.

Colonel Parrilla petitioned the ruling junta in Mexico to authorize him to form an army and seek out the Indians that had attacked the mission. He also proposed that the San Sabá *presidio* be abandoned. He was authorized his campaign in June 1758 but could not abandon the *presidio*. It took Colonel Parrilla over a year to gather his

* Editor's Note: An article on the San Sabá *presidio* by James Ivey will be featured in the October 1981 issue of *La Tierra*.

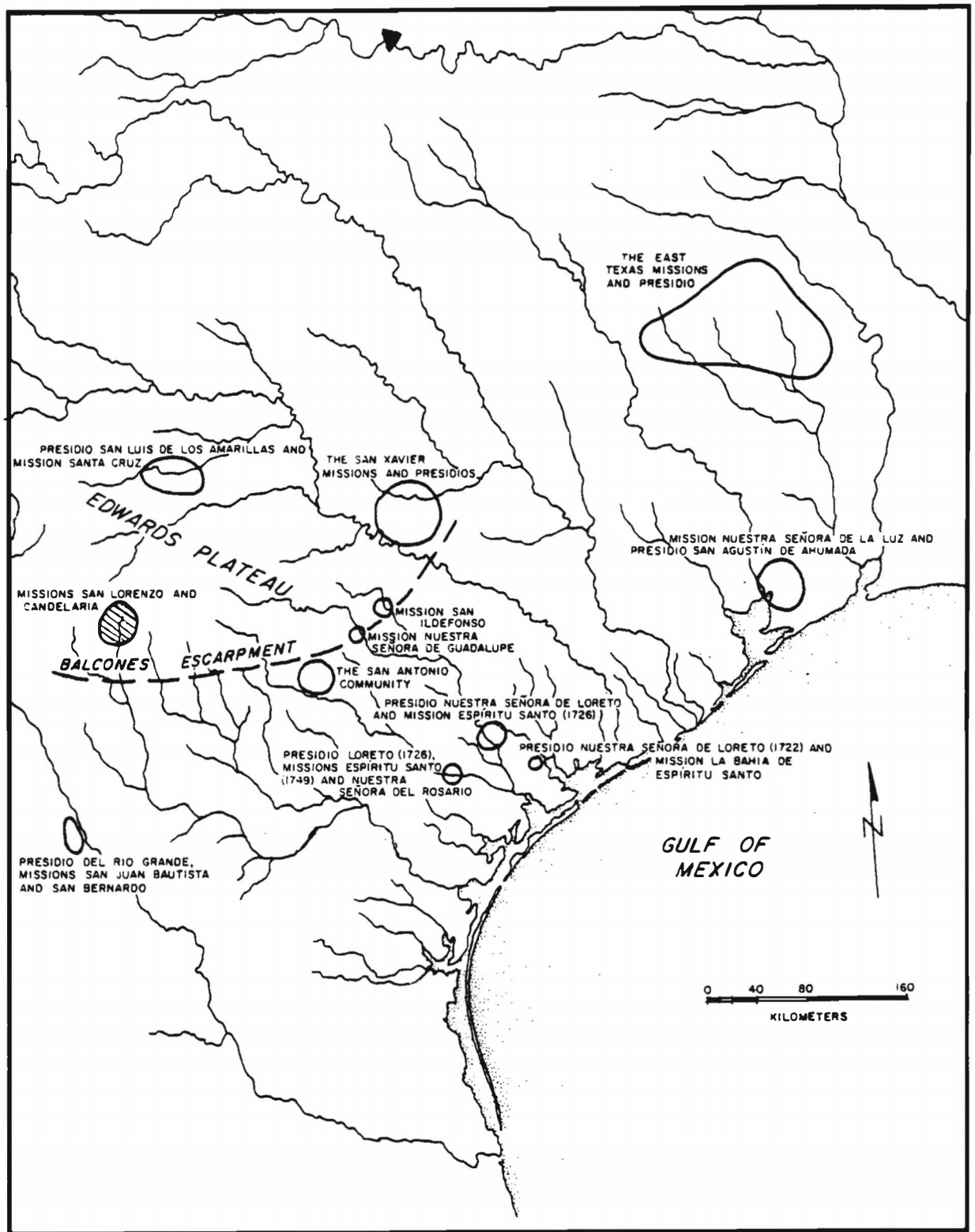


Figure 1. Relative location of Missions San Lorenzo and Candelaria (cross hatched area) to other Spanish sites in Texas and Northern Mexico. The triangle on Red River (center, top) is the approximate location of "Spanish Fort," the Wichita village attacked by Colonel Parrilla in 1759. (Map adapted from Fox 1979:4, courtesy of UTSA, Center for Archaeological Research.)

army of 600. Traveling north from the San Sabá site, the first engagement with the Indians took place on October 2, 1759. The Spaniards easily defeated a group of Indians on a Tonkawa ranchería killing 55 and capturing 149. Emboldened by this victory, Colonel Parrilla decided to attack the major Wichita village on the Red River, where the Indians had fortified their village and reportedly had received assistance from the French (see Figure 1). The next engagement began on October 9. This time, through a series of well-planned events by the Indians, the Spaniards found themselves on the defensive. Fighting continued until dark, and Colonel Parrilla's situation was hopeless. After a hasty assessment of the situation, Colonel Parrilla decided to give up the campaign and retreat to the San Sabá *presidio*. Thus ended the so-called Battle of Spanish Fort. The Indians had by no means won a decisive victory over the Spaniards but the message was clear--the Spaniards would not control the Indians with military might. Undoubtedly this message was clear to the Lipans also and would cause the Lipans to be skeptical in future attempts to entice them into missions with offers of protection.

Colonel Parrilla was relieved of his command and replaced by Captain Felipe de Rábago y Terán. Captain Rábago was a bit more optimistic in his approach. He repaired the fort and procured a full complement of soldiers and horses. He also distributed a considerable amount of goods to the Lipans to entice them under his protection. He also sent soldiers along on several bison hunts (*ibid.*).

In August, 1761, Captain Rábago told the viceroy that he felt a successful mission could finally be established. To further his chances, Captain Rábago asked that the other Texas missionaries be instructed to turn away new bands of Lipans and send them his way. Father Jiménez arrived for a November 3 meeting with one Lipan chief who claimed that he and ten other chiefs were ready to bring their tribes into a mission.

The matter was not so simple, however. The Lipans did not want to settle in the ill-fated San Sabá mission. They wanted a mission in their territory on the upper Nueces River. Furthermore, the Indian spokesman asked for release of a particular Indian captive and enough soldiers to accompany them on a large-scale bison hunt. The Lipans also wanted a military escort to raid the Comanches, but Captain Rábago talked them out of this (*ibid.*).

At the conclusion of the meeting, Father Jiménez returned to his mission on the Río Grande to secure supplies and discuss the matter with his superiors. Father Jiménez and Captain Rábago both felt a need for swift action to get the new mission underway--swifter action than waiting for the formal approval for the mission to be granted by the political hierarchy. The Lipan chief who agreed to settle at the new mission was also impatient and arrived at San Sabá in December, 1761, to urge Captain Rábago along. Rábago wrote to Father Jiménez and then set out with 30 soldiers to meet the Apaches at the new site. Father Jiménez, with Father Baños and the supplies, joined the group on January 16, 1762. Exploration for a final site began. A spot was chosen for the main mission on the east bank of the Nueces River just below the mouth of a spring-fed tributary (see Figure 2). January 23 marked the formal dedication of the site for Mission San Lorenzo de la Santa Cruz. The dedication ceremony was impressive. A hut had been erected with a cross and altar where the priests said Mass. In attendance were 300 Indians who planned to reside at the mission plus a number of others as yet unsure of the whole venture.

For the next few weeks, various tribes came to look over the project. Some agreed to stay or return at a later date. One tribe, led by El Turnio, asked for a separate mission. Fearing that El Turnio would lead his band of 400 to 500 Indians away forever, Captain Rábago reluctantly agreed to try a second mission some distance away. On February 6, 1762, the sister mission was dedicated. It was called Nuestra Señora de la Candelaria. Rábago appointed El Turnio the governor of the village and assigned ten soldiers for defense (*ibid.*).

Work on the San Lorenzo mission progressed through 1762. Several raids by Comanches on Lipan rancherías resulted in casualties, but the main mission area was not attacked. Father Jiménez granted the Apaches permission to leave the mission on

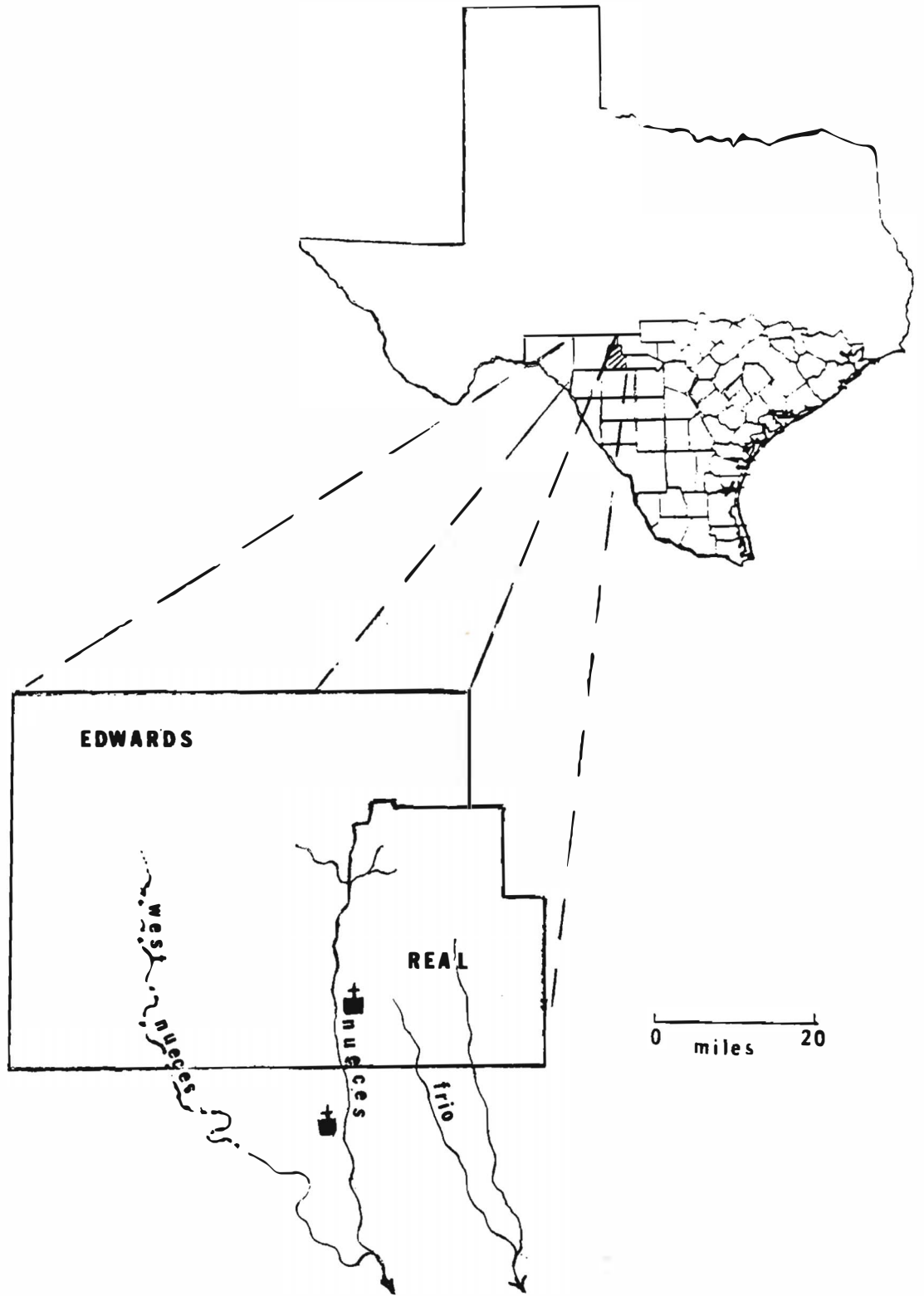


Figure 2. Approximate location of Mission San Lorenzo on the east bank of the Nueces River, Real County, Texas. Mission Candelaria is shown west of the Nueces River in Uvalde County. (Map adapted from Newcomb 1969:Figure 76, and Hester 1971:Figure 24.)

several occasions to hunt buffalo and gather prickly pears. Each time they returned. By early 1763 the missionaries counted 12 separate bands of Apaches in various states of residency at the two missions. This large number of residents and guests severely taxed the supplies of the missionaries which for the most part had to be borrowed from the Río Grande missions since money was not readily available for these new "informally" founded missions. Actually, the hunting and gathering expeditions by the Apache for supplemental food probably made the difference in keeping the mission going, especially at first.

During 1762, work progressed on the permanent structures. In October, Father Jiménez reported that priests' quarters, church and sacristy were finished and a storehouse begun.

Detailed information is lacking for much of the life of San Lorenzo. A small-pox epidemic struck in 1764. Various bands continued to come and go. Land was cultivated and planted, but the supply of food continued to be less than the demand. Comanche raids on outlying rancherías continued, and in October, 1766, a group of 300 attacked the main mission area.

At the time of this attack, all 30 soldiers were at San Lorenzo; Candelaria was probably abandoned by this time. The Spaniards and Lipans repulsed the first charge with two mounted swivel guns. The attacking Indians took cover and kept up sporadic fire until it began to rain and the attackers gave up. The soldiers suffered only light casualties, and the Comanches removed their dead, making a count impossible. The attackers also captured a herd of mares but missed the garrison horses.

One month later, the Comanches (and other allies) tried again to overtake the mission, this time by attempting to ambush the soldiers in the open. Fortunately, a guard spotted the attacking Indians and sounded the alarm. Even with everyone secure inside the fort, the soldiers were too far outnumbered to effectively deter the attackers for long. Cleverly, the lieutenant in charge dressed some of the Lipan women in uniforms and posted them along the walls. This ploy worked well because the Comanches only attacked once and retreated to a grove of trees where they kept up fire until nightfall, when they departed.

Tension mounted throughout the winter of 1766-67. The full force of attacks went against the *presidio* at San Sabá. Captain Rábago was forced to maintain his forces inside the *presidio* and was certainly in no position to bolster the garrison at San Lorenzo. By summer of 1767, all of the Lipan residents at San Lorenzo had departed. The constant threat of attack and obvious lack of protection by the Spaniards resulted in mass exodus of the Lipans from Central Texas. With no resident Indians, the mission would serve only as a stopover point for supply caravans and visitors on their way to San Sabá.

Captain Rábago managed to hang on at the San Sabá *presidio* through 1767. The Indians posed a lesser problem than scarcity of supplies. As the situation became worse, disease and desertion increased. Finally, Captain Rábago took it upon himself to desert the *presidio*. He, his men and families arrived at Mission San Lorenzo on June 22, 1768. In July he wrote to the viceroy giving an account of his actions. In August he received a reply, fully noting the displeasure of the viceroy, but fortunately not being ordered to return to San Sabá (ibid.).

The final events in the life of Mission San Lorenzo are sketchy. On February 9, 1769, Captain Rábago received an order to send 21 soldiers to San Antonio (which, incidentally, was the number taken from the San Antonio garrison originally to support San Sabá). Captain Rábago did not send the men immediately. Instead, he traveled to San Fernando de Austria in Coahuila where he learned that he had been removed and met his replacement, Captain Don Manuel Antonio de Oca. Captain Rábago set out for Mexico City but apparently never made it.

Captain Oca's command was effective April 1, 1769. Sometime after that he reoccupied the San Sabá *presidio* until early 1770 when he returned to San Lorenzo. In June, 1771, several of his soldiers brought charges against him. The governor of Coahuila wrote a letter to the viceroy noting that 29 of the San Lorenzo soldiers had been moved to San Antonio. He felt that the soldiers could be better used in Coahuila. On June 21, 1771 the viceroy issued an order to fully abandon Mission San Lorenzo.

From 1771 until 1936 the mission site served no other purpose than as an occasional Indian camp. In 1936 the site was recorded, and the state erected an identification marker. In 1962 the town of Camp Wood, which had developed just south of the site, decided to improve the mission site. When a bulldozer exposed many artifacts and construction remnants, archaeologists from the Texas Memorial Museum were asked to formally investigate the site.

ARCHAEOLOGY

By the time the archaeologists were called in, approximately 70 percent of the mission compound had been bulldozed. The northern 30 percent of the site that remained intact showed no other visible features other than ridges and mounds of crumbled adobe and rock. The investigators began their work by locating wall foundations with a small ditching machine and shovels. Floors and walls in the site were buried about one foot deep in the bulldozed area and up to three feet deep in the undisturbed area (Tunnell 1969).

The investigators continued to search for walls until a complete outline of the mission compound could be developed (Figure 3). The walls of the compound measured 187.5 feet on the north, 152.5 feet east, 163 feet south, and 166 feet west. Within the compound, the doors of the structures all opened into the central plaza area. There was one main gate on the northern end of the east wall. In general, the compound walls were created by the adjoining back walls of each separate structure. The south wall was possibly a single construction (ibid.).

The materials used in the construction of Mission San Lorenzo were all obtained locally. Cobbles and gravel were readily available in the river, limestone blocks came from the hills within one mile of the mission, and adobe was made from clay around the site. The adobe used in the church was of a more durable variety than that used in most of the other structures. In all structures the adobe was tempered with gravel versus organic materials. Little evidence remains of the wooden materials used in construction except for charred roof beam fragments throughout the compound and a charred support post in structure 14. Iron nails were the only items used in construction not of local origin and they were found throughout the various structures.

SUMMARY OF STRUCTURE EXCAVATIONS

STRUCTURE (Refer to Figure 3)

1. Single adobe floor and fragment of west wall. Partially bulldozed. Probably a dwelling with bones and pottery in the trash.
2. Church. Fully excavated. Two superimposed adobe floors. Bulldozing had removed walls and fill down to 3 - 9 cm of the upper floor, with some of the floor scraped away on the east (which included the sanctuary). Ten intersecting burial pits were excavated (8 adults, 3 adolescents, 4 infants).
3. Only partially excavated. Partially bulldozed to 15 cm from single adobe floor. Fewer artifacts than other structures. Use unknown.
4. Heavily bulldozed to within 1 to 1.5 feet of ground surface (no prepared floor). Enclosed by walls of structures 2, 5 and 6. No roof. Used as a storage area for construction materials.
5. Sacristy. Bulldozed above two adobe floors. Deeply bulldozed along north end where there is possibly a door to structure 9. Not fully excavated. No artifacts.
6. Heavily bulldozed. Only walls and cobblestone walk along west wall excavated. Probably missionaries' quarters.

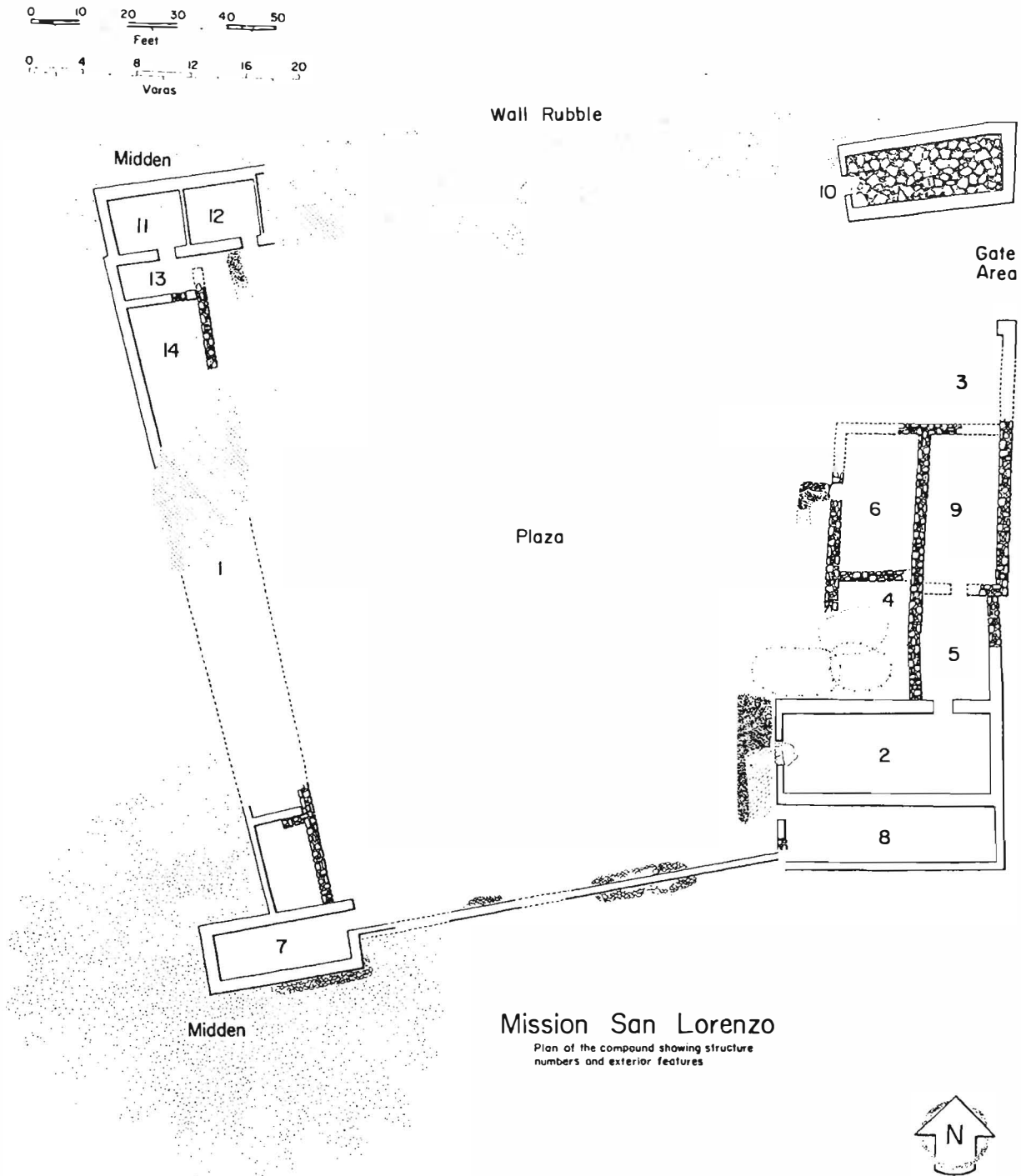


Figure 3. Plan of the compound. Structures 1, 11, 12, and 14 are living quarters; Structure 2, church; Structure 3, unidentified; Structure 4, storage area; Structure 5, sacristy; Structures 6 and 9, convent; Structure 8, stable; Structure 10, granary; Structure 13, kitchen. (Adapted from Tunnell 1969: Figure 3, courtesy of the Texas Historical Commission.)

7. On southwest corner it was heavily bulldozed. Large quantity of burned roof material. Completely excavated. Primary mission midden along outside walls. Served as defensive bastion.

8. On the southeast corner, it was extensively damaged by the bulldozer. Completely excavated. A layer of material tested to be manure. No prepared floor. Five postholes were located in the center, possibly tether posts.

9. Wall foundations were exposed by the bulldozer. Fill not excavated. Prepared adobe floor. No artifacts. Probably part of the friary.

10. Unbulldozed. Fully excavated. A flagstone floor was covered with three feet of fill. Large quantities of burned roof and wall materials in fill. One floor crack contained burned corn, identified as Mexican. The granary was the best preserved of the structures.

11. Northwest corner in the undisturbed area. Large quantity of bone and artifacts in the fill suggest an Indian dwelling. Floor was limestone bedrock leveled with patches of adobe. A small area of midden debris was piled against the outside north wall.

12. Unbulldozed area. Similar floor as structure 11. Hearth located. Floor littered with potsherds, bone fragments, and chert artifacts. Probably an Indian dwelling.

13. Similar to structures 11 and 12. Prepared adobe floor penetrated by a large hearth. A 1- x 2-foot hole in the outer wall possibly served as a ventilator for the hearth. Numerous potsherds and bone fragments. A copper pot rivet and iron ladle were found. Probably used as a common kitchen.

14. Undisturbed. Partially excavated. Prepared adobe floor. A door-way to structure 13 had been plugged with adobe. Numerous stone artifacts, potsherds, bone fragments indicate another dwelling. A circular concentration of 25 limestone rocks and seven large smooth limestone chunks served an unknown purpose.

METAL ARTIFACTS

Of particular interest were three copper vessels and two fragments recovered during the bulldozing operation in the area of the church (see Tunnel 1969:Figure 27). Located with the burials were five religious medals of brass or bronze. Iron objects included a mixture of Spanish (84) and others, possibly from the Camp Wood days or later.

CERAMICS

The majority of the ceramic material was plain, lead-glazed, utility ware. Also abundant were tin-enameled earthenware. Although the investigators catalogued 3,482 sherds, there are undoubtedly many more within San Lorenzo. In fact, over half of the sherds located came from a 10-foot square in the primary mission midden.

GLASS

Thirty-one wine bottle sherds of pale, dull green color were found. The largest sherd is a complete bottleneck. Two colorless glass sherds and 23 pale blue-green bottle glass sherds were found. Another 89 sherds in a variety of colors are from recent times.

BEADS

Twelve types of beads were found, most glass. Four of the types were uncommon and included amber, alabaster, red coral, and pearl. Of the glass beads, the majority represent manufacture of Venice.

BONE AND SHELL

Fifty-three artifacts or samples of freshwater mussel shell were recovered. Of these 17 were classed as scrapers, three ornaments, and 33 shell samples. Worked bone included two pins, one deer antler flaking tool, four deer ulna tools, and 39 ribs showing signs of butcher marks.

LITHICS

The analysis of artifacts from San Lorenzo includes only those lithic artifacts from the immediate mission area. Numerous prehistoric artifacts have been located in the Nueces River area but are not analyzed here.

Among the bifacially flaked tools were nine arrow points including two *Scallorn*, one *Perdiz*, four triangular points (see Figure 4). Thirteen dart points typical of the Archaic period were found. Only the triangular points probably date from the Mission period; the other projectile points predate the period and may have been carried in by mission Lipan residents (Tunnell 1969). Three of the triangular points have straight bases, not uncommon in Mission Triangular points. The fourth specimen (Figure 4,G) has a concave base similar to the *Guerrero* type found at San Juan Bautista (Hester 1977) and at the San Antonio missions (Eaton 1981, Fox 1979). This point also resembles the *Garza* type of West Texas (Johnson, et al. 1977).

The lithic artifacts were all derived from local chert. Chert nodules are readily abundant in the river gravels and limestone formation.

Among the ground stone artifacts were a tubular stone pipe found in the mission midden, eight grinding slabs of local limestone, a small metal fragment, and two mano fragments probably of Mexican origin, and a large pitted slab 26 x 12 cm.

BONE		LITHICS		
	Copper	54	Gunflints	47
	Iron	177	Bifacially Flaked Tools	
	Lead	23	Arrow Points	9
CERAMICS	3,482		Dart Points	13
GLASS	153		Cutting Tools	40
BEADS	132		Blade Knife	1
SHELL	53		Choppers	7
BONE	46		Discoidal	1
			Unifacially Flaked Tools	
			Blade Scrapers	22
			Cortex Scrapers	5
			Flake Scrapers	28
			Scraper Fragments	9
			Gravers	8
			Spokeshaves	12
			Cores	6
			Flakes	462
			Ground Stone	13
			Hammerstones	2

Table 1. Summary of Recovered Artifacts.

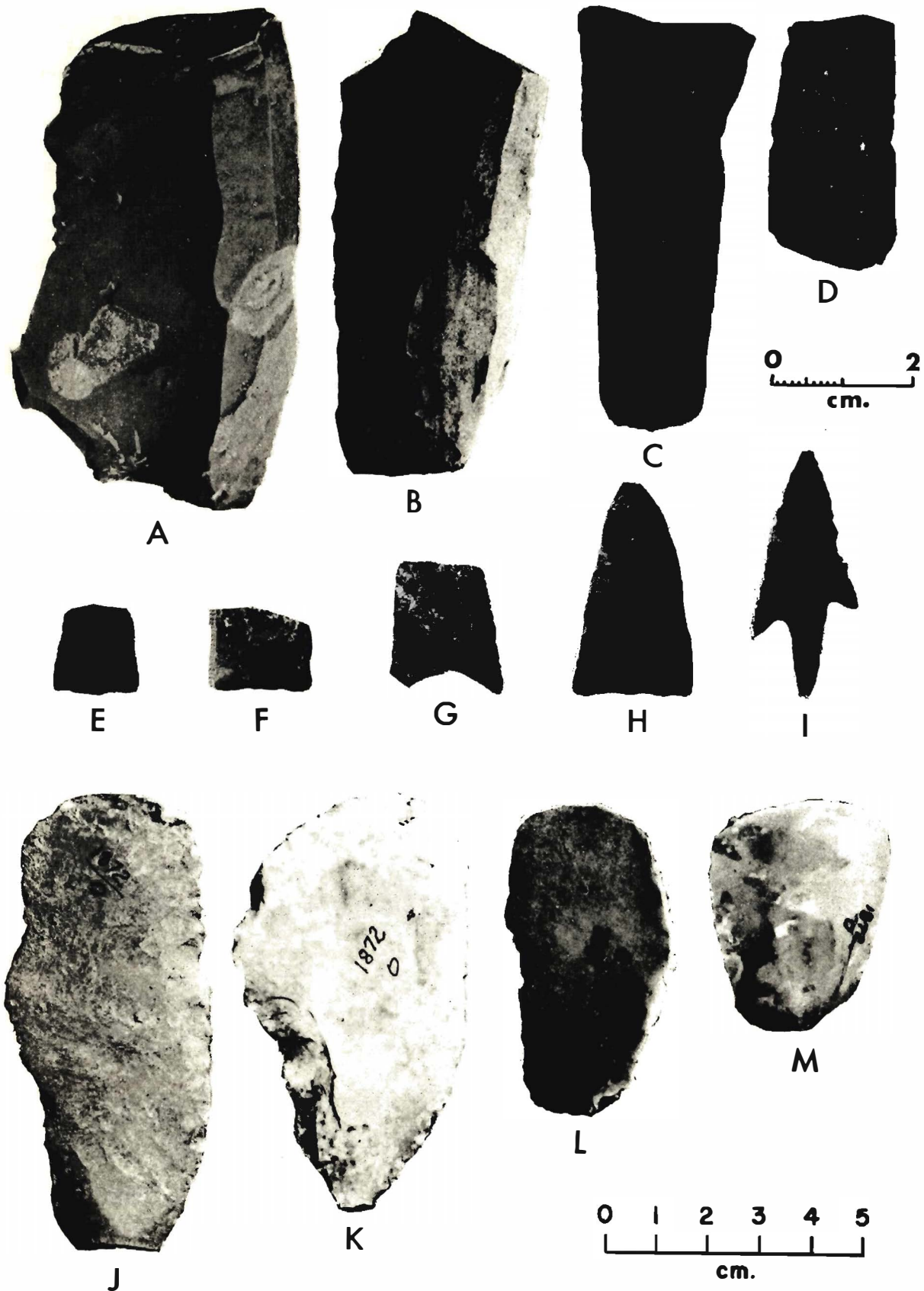


Figure 4. Lithic artifacts from Mission San Lorenzo including flakes (A-D), arrow points (E-I), and scrapers (J-M). Triangular arrowpoints (E-H) represent historic mission occupation; G may be a *Guerrero* point; I is a *Perdiz* point, probably prehistoric. (Illustration from Tunnel 1969:Figure 65, courtesy of the Texas Historical Commission.)

DISCUSSION

The historical recollection of Mission San Lorenzo de la Santa Cruz is both sad and exciting. It's sad in the respect that the Spanish missionaries in their zeal to convert and civilize the Lipan Apaches failed. But this same enthusiasm makes the mission's history exciting. From the beginning, Mission San Lorenzo was an almost impossible undertaking, especially without official sanction, and, moreover, financial backing. Even if Mission San Lorenzo had been established with full authority, there was still a good chance it would have failed. The entire Spanish colonial empire in North America was on the verge of decline. The Peace of Paris in 1763 reduced the French threat and the need for a strong force in Texas. The extended colonization had been expensive and difficult to manage. Spanish authorities certainly did not balk at the reduction of the colonies when the time came. San Lorenzo was established at the wrong time and would probably have been dissolved eventually anyway.

The report by the Texas Memorial Museum, from which this article was drawn, presents an extensive archaeological investigation as well as an ethnohistorical analysis of Mission San Lorenzo. The two approaches blend into a thoroughly searching examination of the life of a mission. Future work in the archaeology of the site, as well as additional research of documentation could certainly provide additional information about the mission and the Lipan Apaches.

ACKNOWLEDGEMENTS

Thanks to Dr. Curtis Tunnell, State Archeologist, the Texas Historical Commission, Austin, for permission to use materials from the 1969 Tunnell and Newcomb report, and for encouraging the publication of this report. Thanks also to Dr. Tom Hester of the University of Texas at San Antonio, Center for Archaeological Research for permission to use the map published in CAR Special Report No. 8 (my Figure 1). A special thanks to Mark Mitchell, and to Jimmy Mitchell and Shirley Van der Veer for their work in preparing the illustrations used in this report.

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Two publications available from the office,
TEXAS ARCHEOLOGICAL SOCIETY, c/o Center for
Archaeological Research, The University of Texas
at San Antonio, San Antonio TX 78285:



"Crew Chiefs' Reports of the 1979 Brownwood
Field School, Bransford Eubanks Ranch"

\$3.00, postage and tax included

"Crew Chief's Instruction Manual" - 1981 Choke
Canyon Field School, Calliham, Texas"

\$1.50, postage and tax included

PREPAID ORDERS ONLY, PLEASE

THE MASON RANCH BURIAL CAVE, UVALDE COUNTY, TEXAS¹

Alice and Robert Benfer

INTRODUCTION

There have been very few published reports of vertical cave burials in Texas (Benfer and Benfer 1962; Greer and Benfer 1963; Givens 1968; Collins 1970; Scruggs et al. 1978; Skinner et al. 1980). This report summarizes work in 1961 and 1962 to collect and salvage as much archaeological information as possible from the Mason Ranch Burial Cave in Uvalde County, Texas. This cave is a thirty-two foot vertical shaft which contained the bones of 25-50 individuals. Artifacts recovered from the site included *Travis*, *Nolan*, *Tortugas* and other dart points, which suggests that the burials may be Archaic dating approximately 3500-2000 B.C. Materials from the bottom of the cave may date as early as 6000-8000 B.C. based on paleontological evidence.

LOCATION AND DESCRIPTION OF THE SITE

There are at least three vertical caves with skeletal material in Uvalde County, Texas; however, none have been systematically investigated. One of these is the Mason Ranch Burial Cave, located on the late Fred Mason, Jr.'s ranch, 22 miles northwest of Uvalde, in the southwestern edge of the Edwards Plateau (see Figure 1). In this area, a great deal of white Edwards Limestone is exposed. The relief of the northern part of the county, including the area around the cave, contrasts markedly with the southern part. Geologically, the two parts of the county are separated by the Balcones escarpment, which began its activities in the early Miocene and may still be continuing. The resulting uplift of the escarpment has caused the northern part of Uvalde County to be interlaced with many small streams, giving it more rugged relief than the Coastal Plain to the south. In the far northern part of the county, rolling hills drained by dry creeks are the main topographical features. Vegetation is sparse today, consisting mainly of mesquite, brush, and cactus.

The cave is located 75 yards from the crest of a hill and is three-quarters of a mile from Indian Creek, a large, dry creek which drains over 40,000 acres. The Mason Ranch is over 8,000 acres and contains at least seven other caves, five of which are vertical caves. None of the other caves show evidence of human occupation or burials. However, when the Mason Ranch Burial Cave was cleared of dirt and clay fill, the cave proved to be essentially vertical, with practically unscalable walls. The cave is rich in bones with some cultural material.

HISTORY OF INVESTIGATIONS

In early May 1961, Fred Mason, Jr. began digging in search of water at the cave on his ranch. A considerable quantity of human bone was noted in the cave and this was reported in an article in a San Antonio newspaper. On May 14, 1961, we visited Mr. Mason and found that he had dug to a level of about 22 feet beneath the surface. He reported that skeletons were "laid out on the ledges" at varying depths from the surface (estimated to be at approximately 12, 17, and 22 feet). While digging, Mr. Mason's laborers used picks and shovels, hauling the dirt out of the cave with a

¹ A very condensed version of this paper was published in the April 1962 issue of *The Texas Caver* (Vol. VIII, No. 4:41-42). The present version is a modification of the author's original manuscript (on file with the Texas Archeological Research Laboratory) to exclude references to photographs (not available for publication) and to add updated reference materials, along with minor editorial changes (with the permission of the authors).

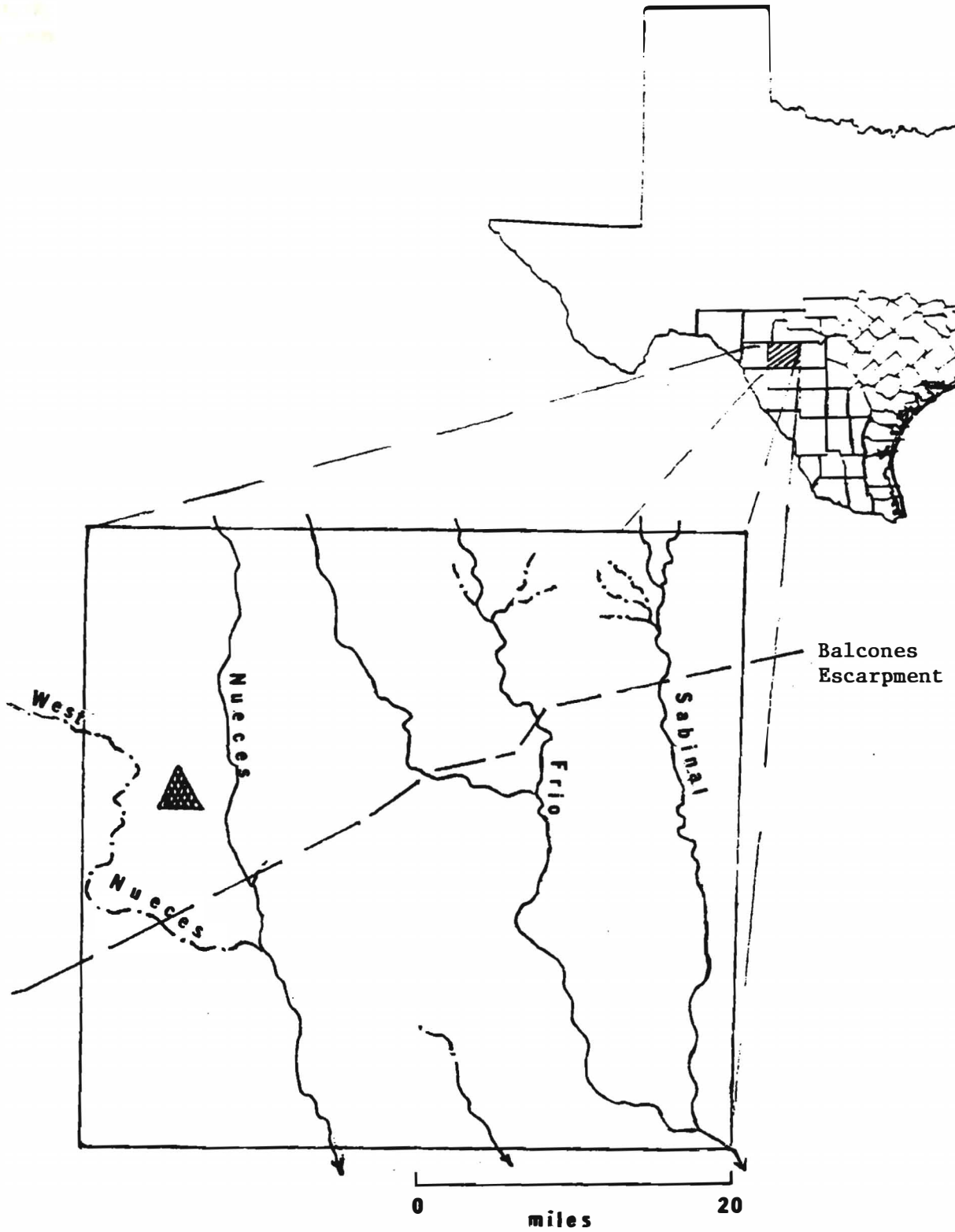


Figure 1. General location of the Mason Ranch Burial Cave, Uvalde County, Southern Texas. Balcones Escarpment (dashed line) marks the southern edge of the Edwards Plateau.

hand-operated hoist. The fill was dumped in a pile about 15 feet from the cave. The majority of the skeletal material and some flint was recovered by Mr. Mason and his laborers in the process of digging. The rest of the material was collected by sifting the excavated fill after it had dried.

On October 21, 1961, after Mr. Mason had reached a depth of approximately 22 feet, we attempted to begin a detailed excavation. Two small pits were dug to a depth of about one foot. Our efforts were rewarded only by some additional skeletal material.

On November 4, we returned to find the rancher had dug ten feet deeper. Large quantities of animal bones and additional human skeletal material, none of which was articulated, were found by the authors along with several pieces of worked flint.

In investigating the cave, it was found that there were several passageways and one fair-sized room. In a small crawlway, large amounts of both human and animal remains could be seen scattered in a matrix of mud, clay, rock, and bone. From their position, it appeared that they had been washed in when the cave was not completely filled with soil.

In early April, 1962, another trip was made by the authors from Austin to the Mason Ranch. At this time, we mapped that portion of the cave which had been excavated (see Figure 2). The two crawlways leading off the main shaft eventually encounter limestone. If the main shaft stops at the level where limestone was encountered and if the limestone surface is relatively flat, then there would be a minimum of about five feet of further deposits remaining. Of course, this is only a minimum figure; there could be more.

At the time of the last trip (April, 1962), as much information about the skeletal remains was gathered as possible. The skeletal materials were photographed in large lots, depending on their container. Their grouping into lots by storage container was not particularly meaningful (since Mr. Mason did not remember which bones came from which level and bone fragments were often intermingled). However, since some of the fragments could be matched with others, the authors felt it worthwhile to photograph the remains in their groupings by boxes.

THE DEPOSITS

Essentially, there are three types of deposits found in the cave:

Stratum 1 - The fill in the upper level of the cave when first seen by the authors, before digging was started, was dry dirt and rodent nests. This dry dirt was evidently windblown and washed in only slightly; the cave does not now appear to drain much water. This type of material extends to about four feet.

Stratum 2 - Between four feet and about 20 feet, as well as in pockets at lower levels, is a second type of deposit, Chernozem (Ruben M. Frank, personal communication). This type of soil is typically produced by calcium carbonate rocks, in this case, limestone; the rock having been altered in a fairly moist climate. Considerable skeletal and faunal material, as well as some cultural materials, were recovered in this zone.

Stratum 3 - Between 20 feet and about 32 feet, a red clay was encountered. The clay is found in all of the caves in the general area. Such clay is usually formed by the leaching action of water on limestone and may be considered as a secondary deposition. Of course, limestone fragments are found throughout the depth of the cave. The map of the cave (see Figure 2) illustrates the condition of the deposits at the 32-foot level. The section of the cave northwest of the main sink is composed of rock and clay fill. The average ceiling height in this area is about two feet. The passage which follows the A-A' section northeast is primarily black dirt fill, and it is this section that many animal bones were removed by Margaret Cridlebaugh Frank (see later faunal analysis).

MATERIALS RECOVERED

Human Skeletal Remains - Since time was not available, no attempt was made to determine the exact number of individuals represented. Table 1 presents those data

MASON RANCH BURIAL CAVE
UVALDE COUNTY, TEXAS
BRUNTON & TAPE SURVEY 4-1-62 BY
R. BENFER & R. FRANK

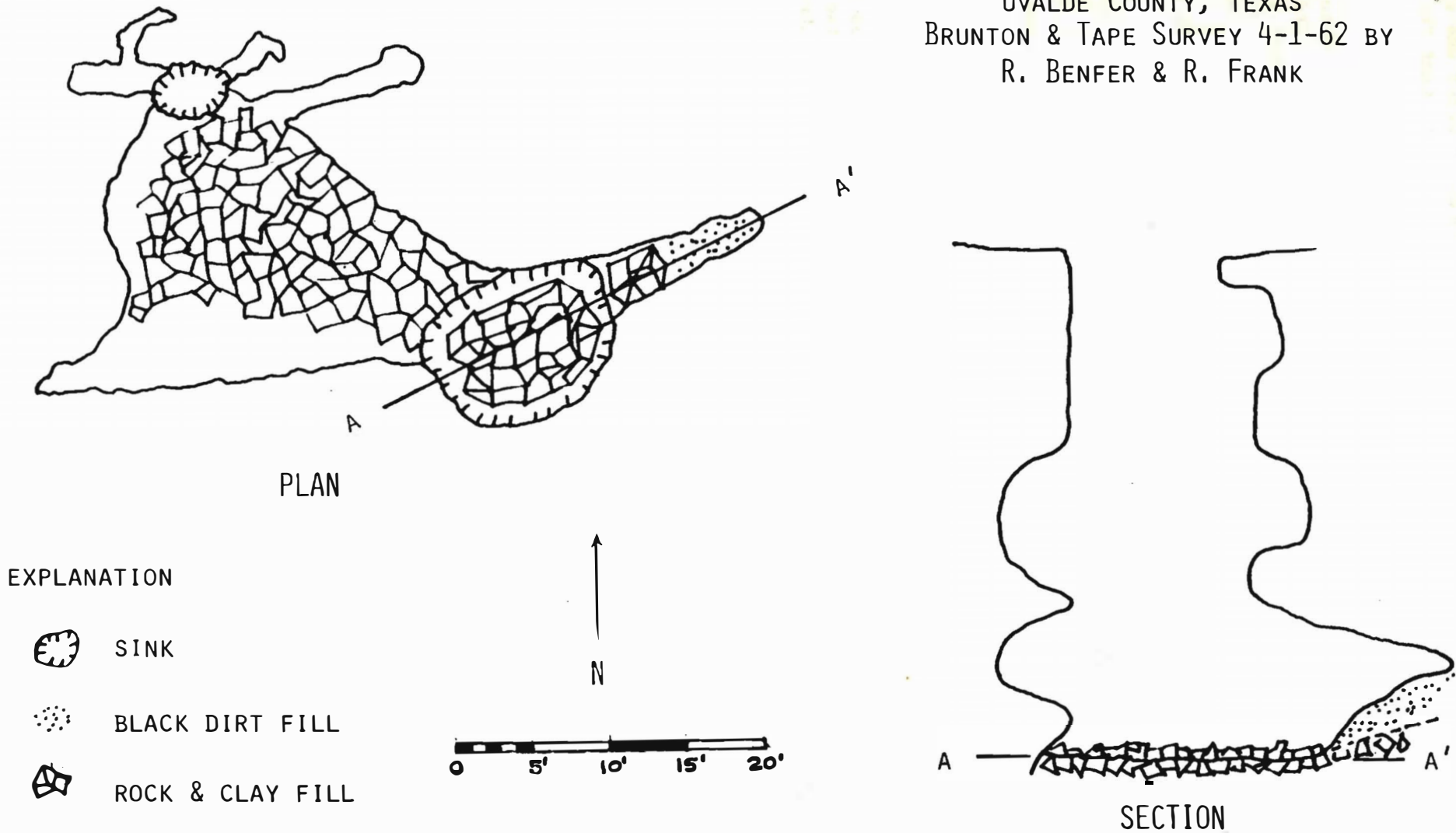


Figure 2. Mason Ranch Burial Cave showing condition of deposits at the 32-foot level. A-A' section contained many animal bones.

that were gathered. For the most part, an attempt was made to identify only that material documented by container lots. The majority of the bones in boxes and cans were not studied due to their fragmentary nature. The authors estimate that the number of individuals represented would be at least 8 (the number of left Talus recovered) and not more than 25 to 50 individuals, with the authors suggesting the higher limit.

[Editor's Note: The above estimate is an added note to the original manuscript with a date of January 1963; the original estimate of 50-100 was lined out. *The Texas Caver* article gave an estimate of 50-150 (Benfer and Benfer 1962:42). Skinner later reported the estimate to be about 80 individuals (Skinner et al. 1980:11). Given the way the skeletal materials were excavated and collected, and the fragmentary condition of the bones when photographed, it was not possible to make any absolute count. However, we do know that there were at least eight, and, to be on the conservative side, should probably accept the upper estimate of no more than 50 individuals.]

Mr. Mason reported that at the upper levels of the cave, the skeletal materials that he encountered appeared to be articulated. He said that the bodies were laid out on ledges. At lower levels, however, the authors noted that the materials were extremely fragmentary and probably not articulated when deposited. From about 20 feet to the 32-foot level (Stratum 3), many split shafts of long bones were encountered. The shafts were split in a manner that does not suggest natural decomposition (T. H. McKern, personal communication). Also, several fragments of burned human bone were recovered (see Table 1). Several pieces of thermal fractured rock were also recovered from the cave; it is not uncommon to find thermal fractured rock on the surface.

Could these split long bones suggest cannibalism, with the bones being split to obtain the marrow? If so, the cave was used as sort of a garbage dump for both fragmentary human and animal bones, as well as a burial cave for articulated bodies.

In Table 1, all skeletal material is assumed to be adult unless otherwise stated. As the data in Table 1 shows, very few young individuals appear to be represented in the collection.

Faunal Materials - A faunal analysis was performed by Margaret Cridlebaugh (now Margaret Frank). The following discussion involves only the animal remains which she removed from the cave.

Deer, goat, bat, shrew, cottontail, snake, frog, and lizard are among the common animals identified. Teeth were identified as belonging to deer, skunk, and dog; these were removed from the very top of the back dirt and their provenience is therefore doubtful.

Under the order Rodentia, the following have been found:

- Sigmodon hispidus* (cotton rat)
- Neotoma micropus* (wood rat)
- Neotoma* sp. (wood rat)
- Onychomys leucogaster* (northern grasshopper mouse)
- Peromyscus hispidus* (field mouse)
- Peromyscus* sp. (field mouse)

The northern grasshopper mouse (*Onychomys leucogaster*) normally inhabits hot, arid climates (Hall and Kelson 1959:662). The species is now extinct in the area of the cave and has been for at least 50 years. The cotton rat (*Sigmodon hispidus*) is an inhabitant of grasslands (ibid:671). Cridlebaugh suggests that perhaps the climate was hot and arid with localized streams and grasslands (Cridlebaugh 1962).

Cultural Material - Worked flint was classified as dart points, scrapers, graters, burins, knives, choppers, and utilized flakes. Criteria for the classification are as follows:

- (1) Dart point - stemmed and bifacially worked, thin and symmetrical.
- (2) Knife - bifacially worked, larger and thicker than dart points but not as finely balanced or generally as symmetrical.

TABLE 1

Skeletal Material Recovered from the Mason Ranch Burial Cave, Uvalde County, Texas

	<u>Left</u>	<u>Right</u>	<u>Unkwn</u>	<u>Comment</u>		<u>Left</u>	<u>Right</u>	<u>Unkwn</u>	<u>Comment</u>
Femurs - ends	8	8	15	4 child	Skull- Parietal	2	3	6	
shafts	18	19	30	1 child	Frontal	2	1	0	
Tibias - ends	4	3	1		Occipital	1	0	3	
shafts	4	9	15	1 child	Auditor M.	1	0	2	
Fibulas - ends	2	0	0		Temporal	0	0	4	1 burned
shafts	1	0	13		Mastoid	0	0	1	
Humeri - ends	1	3	0		Mandible ■	6 fragments, 4 with teeth			
shafts	1	2	1		Maxilla	5 fragments, 4 with teeth			
Radii - ends	1	3	3		Teeth				
shafts	3	1	2		Molars			20	
Ulnas - ends	2	0	0	1 complete	Premolars			9	
shafts	0	0	0	right ulna	Incisors			5	
Scapulae					Canines			2	
Glenoid & corocoid	1	1	0		Pelves - one articular surface of pelvis, child				
Glenoid cavity			1		one left articular surface, child				
Corocoid	1	1	0	right burned	one right ischium				
Fragments	0	0	1		one ischium fragment				
Clavicles	6	0	0		two left ischium and acetabular (one child)				
Ribs -	2	3	6		one superior ramis of pubis and acetabular				
fragments			2	burned	(right, female)				
Patellae	2	2	0		Vertebrae - one complete axia, mature				
Foot - Talus	8	2	1		one cervical body, mature				
Calcaneus	0	1	0		four thoracic body (1 child, 2 young, 1 mature)				
Cuboid	2	0	1		two lumbar body, mature to old				
Metatarsal	3	1	0		one sacrum, female, young adult (fused fifth				
Navicular	1	1	0		lumbar).				
					Hand - some unidentified phalanges				

- (3) Scraper - uniaxially worked, generally asymmetrical.
- (4) Utilized flake - flakes which appear to have use marks, otherwise not chipped.
- (5) Chopper - uniaxially worked or bifacially worked stone, generally large, asymmetrical with crude removal of flakes (percussion).
- (6) Graver - a piece of flint that has a pointed projection formed by careful removal of flakes, projection is beak-like.
- (7) Burin - a piece of flint with use marks, which has two flakes (burin spalls) removed from the edges, forming an angle of less than 90°.

Artifacts recovered from the Mason Ranch Burial Cave were as follows:

Dart Points - Seven points were included in the collection, four of which were fragments. One almost complete *Travis* point was identified (see Figure 3a). Although part of the base is missing, one point was classified as a *Nolan* point (see Figure 3b) because the intact portion shows beveling on the right side. Another point was too crude or unfinished to be classified. The basal end of a *Tortugas* point was also among the materials recovered (Figure 3d). One of the unidentifiable points (see Figure 3e) was thick, small, and well worked; it resembles a true arrowpoint. The other two fragments were too small to be identifiable. The maximum length of the dart points (excluding the two smallest fragments) ranged from 3.2 to 6.5 cm; maximum width from 2.4 to 3.3 cm; and maximum thickness from .4 to .6 cm.

Knives - Of the 24 knives or knife fragments found, five were plano-convex, large, and crudely worked. Three fragments were identified as the distal ends of knives with rounded convex bases. Three fragments, two distal ends, and one almost complete knife have convex and indented bases. One knife was found with such indentation, but it had an irregular base. One small crude knife shows evidence of fire cracking. One knife is particularly interesting due to its beauty and fine workmanship. Although it could be considered a scraper, we categorized it as a uniaxially worked knife due to its exceptional workmanship, fine balance, and pointed shape (see Figure 4). The remainder of the knife fragments were too small to be of diagnostic value.

Scrapers - Four scrapers were identified; three resembled utilized flakes but had some retouching along the edges.

Utilized Flakes - Six flakes have distinctive fracture patterns consisting of one planar side and one side with a ridge usually running down the center. One billet flake was also identified.

Burins - Two burins were identified.

Gravers - Only one graver was found, which was evidently made from a broken knife.

Choppers - Two large choppers with cortex were found, as well as two large choppers evidently made from cores.

Other Significant Material - Three pieces of unused but possibly fire cracked flint were found; however, they could have been thermally fractured. Several pieces of freshwater mussels, as well as many snail shells were found in the backdirt. One piece of limonite, orange in color, was also found. Similarly colored limonite is found in Kelley's

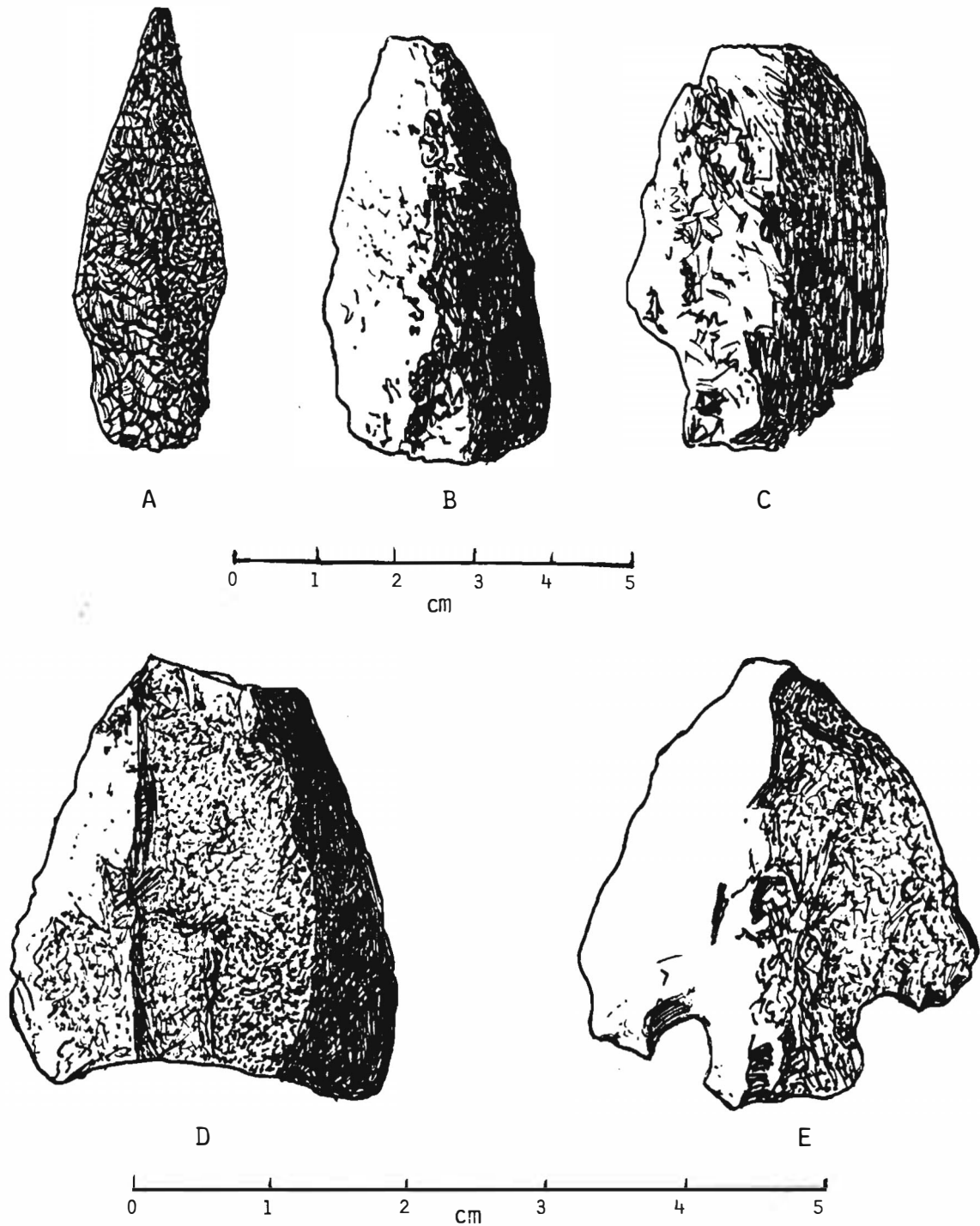


Figure 3. Rough Drawings of Projectile Points from the Mason Ranch Burial Cave, Uvalde County, Texas. A, *Travis*; B, Broken *Nolen*; C, Broken Preform; D, Broken *Torgugas* dart point; E, Small thick arrowpoint. Note difference in scale between A-C and D-E.

vein, a highly mineralized outcropping about 200 yards from the cave. Due to the location of the vein, however, it does not seem likely for the piece of limonite found in the cave to have been washed in; thus it is also a possible cultural artifact.

Distribution of the Materials - Mr. Mason found three pieces of worked flint in the 12- to 18-foot level, one of which was a *Nolan* point. Sixty objects of cultural significance were recovered from the 18- to 26-foot level; included among these was also a *Nolan* point. From 26 to 32 feet, three pieces of worked flint, including a burin, were found. Many of the artifacts were recovered from the backdirt, and no definite level may be assigned. For example, the *Tortugas* point was recovered from the freshest part of the backdirt, and presumably came from the lowest level of the cave.

Excepting the general statement that the skeletal material tended to increase in frequency with depth, nothing can be said about the distribution of the bones.

ARCHAEOLOGY OF THE AREA

Since few artifacts other than bone were found, and nothing *in situ*, the Mason Ranch Burial Cave is of less interest in isolation than when considered in relation to the archaeology of the immediate area. The Mason ranch is essentially square and the burial cave lies in the southcentral section of it.

Burnt rock middens - Mr. Mason knows of 13 middens on the ranch and the authors visited two of these. One midden is 60 feet in diameter and contains four feet of deposit. It is located about one mile east and a little south of the burial cave, on the bank of a tributary of Indian Creek. Although set against the side of a cliff along with several shelters which face north, testing revealed no evidence of occupation in the shelters. The authors and John Greer tested the edge of the midden by placing one five-foot square in the edge of the midden. A *Pedernales* point was recovered three inches above a clay layer. Two inches under this clay layer, a *Nolan*, *Travis* and a *Langtry* point were found. Apparently both the midden and burial cave are Archaic (possibly Middle Archaic) since *Nolan* (and other Middle Archaic) points are found in both. Local pothunters dig in Mr. Mason's middens and report finding many dart points.

Hearths - On the highest crest of a hill in the extreme northwestern corner of the ranch, an exposed pile of fire-cracked rock was found by Bob Benfer and John Greer, which they consider to be a hearth. Many flint chips were also noted on the hilltop. From this overlook, one can see from five to ten miles in any direction; perhaps the hearth is the remains of a signal fire?

Surface Material - Mr. Mason's ranch is very rich in surface material. Directly across Indian Creek, about one-quarter mile from Burial Cave is a pasture which is literally covered with worked flint. In general, the amount of surface material gives the impression of very substantial populations.

Historic - Mr. Mason says that during the latter part of the 19th century, a Comanche raid occurred east of his ranch, and a local legend has it that a battle occurred on the hill in which the Burial Cave is located.

Stone Markers - On the hill where Burial Cave is located, there are 13 piles of rock. The rocks are usually large, about 30 pounds each, and are stacked to a height of about three feet. The piles are about three feet in diameter. They rest on exposed limestone and are not solid; one can see that there is nothing inside or under them. No apparent order is noticed in their location; some are only a few feet apart and others are hundreds of feet from the nearest pile. One pile, about 75 yards up the hill from the cave, is capped with a triangular rock which "points" directly at the cave opening. Kelley, a prospector who worked in the area and developed the nearby vein of limonite, dug several test pits on the hill, and he could conceivably have placed the piles as markers. However, none are very close to his test pits. On the other hand, it is possible that these rockpiles are prehistoric.

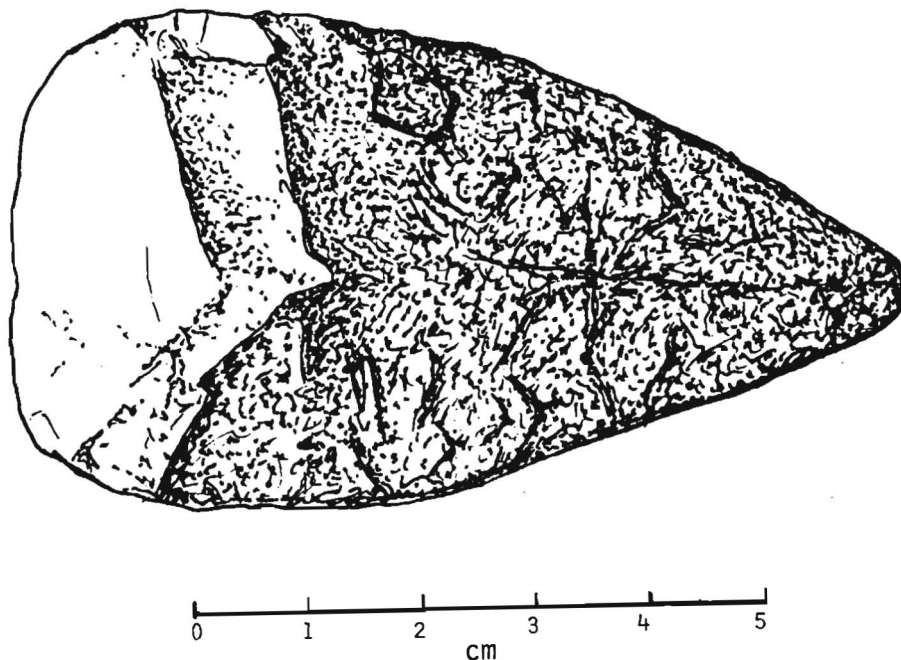


Figure 4. Unifacially worked biface or knife from the Mason Ranch Burial Cave.

CONCLUSIONS

Accepting the rancher's observations, it would appear that six burials were found in the first 22 feet of the cave. The ledges which line the walls of the vertical shaft were evidently a preferred resting place, and Mr. Mason reported that the skeletal materials were articulated, as if the bodies had been laid out on the ledges. This evidence suggests that the Mason Ranch Burial Cave is a unique and important archaeological site.

At lower levels, however, the authors observed that the bones were in random order, with only a few rodent skeletons being articulated. (One possible exception is what appears to be an articulated human skeleton a few feet directly south from the edge of the second pit, which was not excavated). Below 22 feet, a much greater number (and proportion) of animal bone was recovered. Split long bones were also found at this level. Since the cave could drain no more than an acre at most, it seems unlikely that the large number of bones could have all been washed in. Also, the walls of the cave are too steep to have been a preferred animal den. Thus, the authors feel that the large number of bones, particularly at the lower levels, were probably dumped in by the prehistoric occupants of the area.

Kelley's vein, with its multicolored limonite, could have been a factor in the prehistoric occupation of the area; the limonite could easily have been used for point. In the area of the Indian Creek drainage, Kelley's Vein is the only easily accessible mineral source known.

Based on the *Nolan*, *Travis*, and *Tortugas* points recovered from the cave, its use probably was between 4000 and 2000 B.C., the overlap of the estimated dates for these various point types (Suhm and Jelks 1962:225, 249, & 251). This is a crude estimate but not enough geological work has been done at the site to place the date of occupation more exactly. Cridlebaugh (personal communication) suggests that the animal skeletons she has studied from the 32-foot level would fall in the 8000 to 6000 B.C. time span. The climate would have been more suited to grassland and Indian Creek may have been running during the early part of the Pre-Archaic period. If this is so, as suggested by the paleontological evidence, then the large amount of bone in the lower levels of the cave, the surface materials, and the number of middens seems to suggest a large population.

EDITOR'S ACKNOWLEDGEMENTS

Our thanks to the Benfers for giving permission to publish this version of their article. While a highly condensed version was published previously in *The Texas Caver*, it was very preliminary and was designed primarily for spelunkers. Thus, the present publication of information represents the first detailed look at the archaeology of the Mason Ranch Burial Cave. Our appreciation also to Carolyn Spock and the Texas Archeological Research Laboratory in Austin, who attempted to recover publishable photographs of the Mason Ranch Burial Cave artifacts. Unfortunately, the photos on file at TARL are not of sufficient quality to permit publication; however, Carolyn Spock did provide photocopies of the file materials, on which the artifact illustrations included in this article are based. A search was also made for the artifacts themselves, but they were apparently not stored with the TARL. Thanks also to Dr. Alan Skinner who provided a copy of the 1962 Benfer and Benfer report, and encouraged publication of this report.

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Sam Laskowski, a sophomore at UTSA, shows Dr. Tom Hester an unusual bison bone he discovered at a Choke Canyon site (Photo by John Poindexter, courtesy of UTSA).

STAA SUMMER FIELD SCHOOL SCHOLARSHIPS

As reported in the April issue, STAA now has a scholarship fund with the objective of helping worthy archaeology students attend summer field schools to develop the practical field experience needed to be a practicing archaeologist. Four scholarships were awarded for the 1981 field school program. Recipients were: Ann Howells of the University of Denver, Robert McGrail of Rochester University, Darryl Neff of Columbia University, and Samuel Laskowski of UTSA (shown above). All of this year's recipients attended a six-week course at the Choke Canyon area near Three Rivers in Live Oak County. "Many very talented young people are unable to attend the field school because of the costs involved," commented Jack Eaton, associate director of the UTSA Center for Archaeological Research and a member of the STAA scholarship committee. "The financial assistance provided through the scholarship fund will enable them to take advantage of the intensive field training and lectures offered by the field school."

Informal feedback indicates that the 1981 field school was an extremely successful one, despite the rainstorms and mosquitos. The four STAA scholarship recipients learned a great deal and benefited from this field experience; thus, the objectives of the scholarship program were fully met.

If the STAA scholarship program is to continue into 1982 and beyond, additional funds are needed. At least \$200 to \$300 will be required for next summer. Anyone who would like to donate to this fund, please send a check to the STAA treasurer or contact any STAA board member. And to all those who gave at the April STAA meeting or subsequently, a hearty THANK YOU for making this scholarship program possible!

ADDITIONAL PALEO-INDIAN ARTIFACTS
FROM THE COLETO CREEK PROJECT AREA OF SOUTHERN TEXAS

Richard McReynolds

ABSTRACT

Four Paleo-Indian projectile points were recovered from the vicinity of the Coletto Creek project while the dam and power plant were under construction. These specimens supplement previous reports of Paleo-Indian artifacts in Victoria and Goliad Counties (Birmingham and Hester 1976; Fox and Hester 1976; Fox, Schmiedlin and Mitchell 1980) and complement the developing picture of rather extensive occupation along the Central Texas coast (Hester 1980).

INTRODUCTION

Coletto Creek is the boundary line between Goliad and Victoria Counties (see Figure 1). It is joined from the west by Perdido Creek which flows through Goliad County. The dam for the Coletto Creek Reservoir was constructed immediately below the junction of these two creeks. The power plant was constructed on Perdido Creek just above its junction with Sulphur Creek. Coletto Creek joins the San Antonio River east of Goliad; the San Antonio River joins the Guadalupe River before flowing into the Gulf of Mexico at San Antonio Bay.

A preliminary archaeological survey of the site for the dam and power plant was conducted in 1975 by the Center for Archaeological Research of the University of Texas at San Antonio (see Fox and Hester 1976). The area abounds in Archaic and Late Prehistoric sites, but only a limited number of Paleo-Indian sites have been recorded.

Site development plans for the Coletto Creek power station were drawn in 1976; the plant was completed in 1979 and is now operated by Central Power and Light. The reservoir is controlled by the Guadalupe-Blanco River Authority.

Ben McReynolds is employed by the company which constructed the reservoir and the power plant. He was transferred to the area after most of the earth work had been accomplished. Ben is an avid surface collector, and even though other collectors had preceded him in the Coletto Creek power station area, he has acquired a good sample of artifacts from the vicinity. Three of the points he has found are described in this report; the fourth (Specimen D) was found by Emmitt Ray Long and is in his collection.

SITE

Immediately below the Coletto Creek dam is a fairly high bluff on the south side of Perdido Creek. Perdido Creek makes a sharp bend at this point. It is evidently a vantage point of long standing. A deep drainage cut was made during the dam construction which is perpendicular to and terminating at Perdido Creek. Layers of strata were thus exposed to erosion. The softer, topmost layers of sand and soil were removed to an unknown depth, presumably because of their erosional properties. An Archaic site was encompassed in the removed strata and a large pile of this overburden has produced numerous artifacts as it has eroded. These include *Bulverde*, *Nolan*, *Travis*, *La Jita* and Triangular dart points. In addition, many scrapers, knives, triangular bifaces, and manufacturing flakes are scattered over its surface.

A layer of caliche-looking material was exposed by the drainage cut which contained many heavily patinated flint chips and calcified bone fragments. The maximum thickness of the caliche layer was observed to be about six inches; it dwindles to a thin lens before it terminates. This layer appears to be about eighteen to twenty inches below the present surface. Two specimens shown (Figure 2, A and B) were intact within this layer; also found within this strata was a very finely made triangular point which was completely patinated. A third specimen (Figure 2, C) apparently eroded

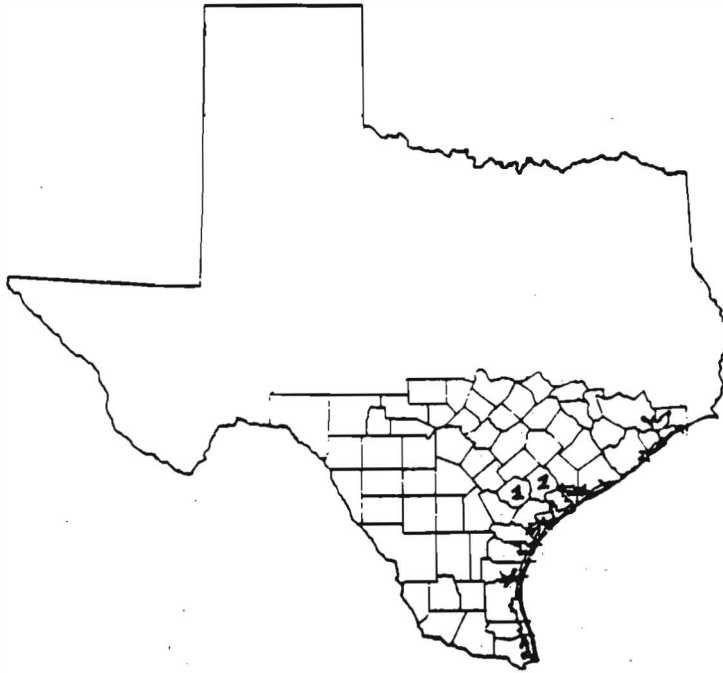


Figure 1. Location of Goliad (1) and Victoria (2) Counties relative to other counties in Southern Texas. Boundary between the two counties is Coletto Creek.

from an adjacent strata; however, its exact origin is not known. Ben's wife, Ann, found a very nice Mammoth tooth in the graded material at this site. [Editor's Note: Mammoth teeth have been found at several coastal sites which also produced lanceolate points, such as *Golondrina*. However, none have yet been documented in direct association with such Mammoth remains. See Hester 1980:6.]

Another Paleo-Indian point (Figure 2,D) was found by Mr. Long on Sulphur Creek in the same general area. It was in material evidently disturbed by construction of an ash pond for the water pump station.

ARTIFACTS

Golondrina (2 specimens: Figure 2, A,B). Specimens A and B are made from a now completely patinated chert. Specimen A had been reworked and has a right-hand bevel on each face. Specimen B was probably broken at an early date and what remains has been damaged by heat fracturing. Both specimens are heavily ground on their lateral edges and bases. Both are flared at the base, a trait diagnostic of the *Golondrina* type. The depth of the basal concavity on Specimen A is not as great as might be expected but is still within the descriptive limits of the type.

Plainview Variants (2 Specimens: Figure 2, C,D). It would be hard to visualize two more different-looking specimens within the same type; however, they do have some similarity. Both specimens have concave bases; both are laterally ground, and both are essentially lanceolate shapes. Specimen C is somewhat like the *Angostura* type and perhaps could be classified as such. Specimen D is large for *Plainview* and in some ways resembles eastern *Clovis* types, although it lacks fluting. Specimen C is made from light, yellow-specked chert and is lightly patinated on one side. Specimen D is made from a brown flint.

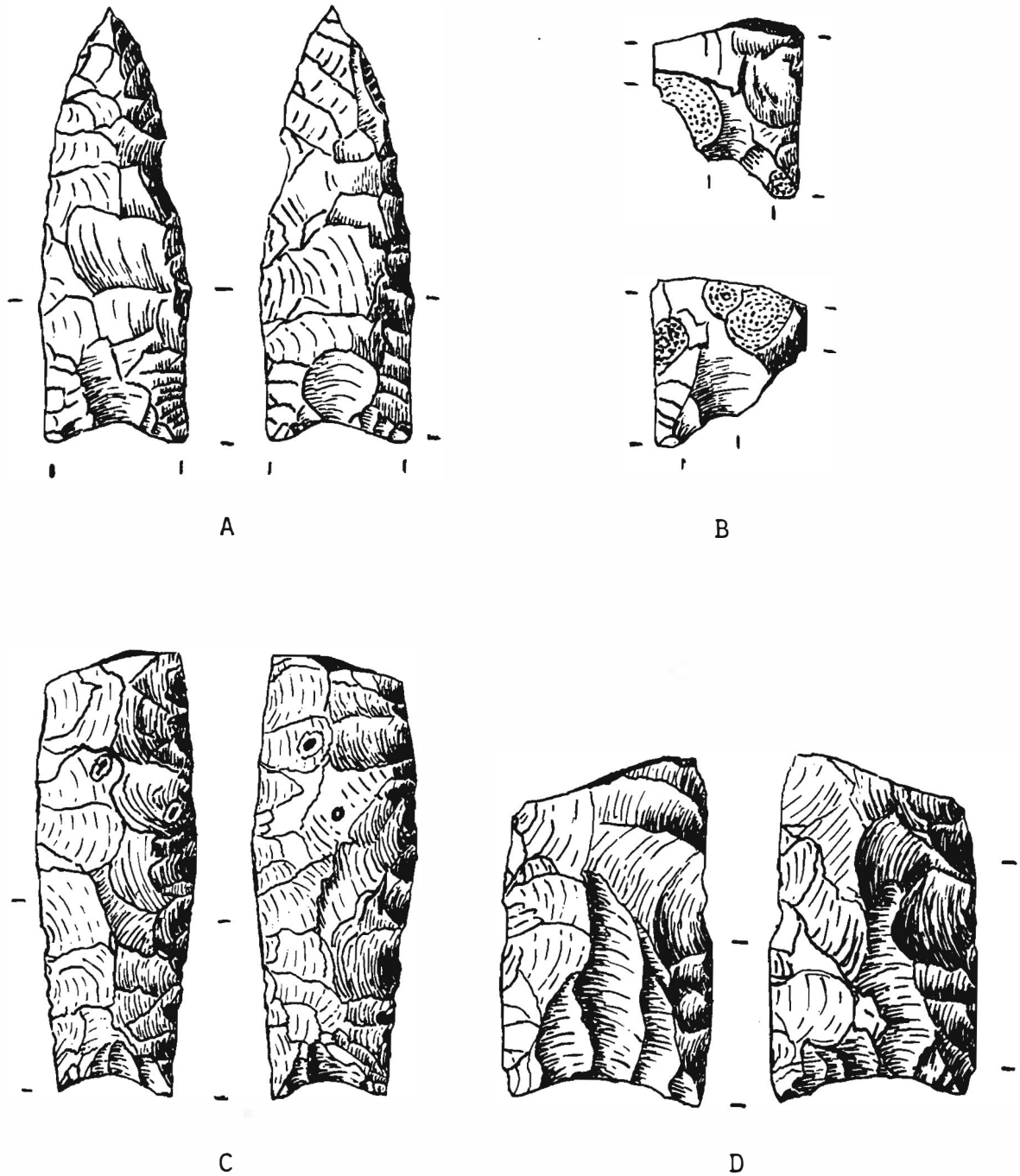


Figure 2. Paleo-Indian Points from the Coletto Creek Project Area. Shown actual size. A-B, *Golondrina*; C-D, *Plainview* Variants. (Drawings by Richard McReynolds.)

In addition to these specimens, it should also be noted that a reworked *Angostura* was found in the same area as Specimens A and B. W. L. Vernon reportedly found several PaleoIndian points at the plant site during the early construction phase, including *Eden*, *Scottsbluff* and *Plainview* types.

DISCUSSION

Golondrina and *Plainview* points have been reported from a limited number of sites in Victoria and Goliad Counties including the Johnston Site (41 VT 15), the J-2 Ranch site, and others. In the survey of the dam area, a number of *Golondrina*, *Angostura*, *Gower* and *Bell* points were documented from surface collecting and from local collections. This paper has documented additional specimens from a previously buried site which is now exposed and eroding away, and from the area disturbed by power plant construction. The considerable evidence of PaleoIndian presence in the Coleta Creek project area suggests that this was an area which was extensively used and the presence of Mammoth remains hints at the exploitation of now extinct megafauna during the Late Paleo-Indian period. The recently reported radiocarbon date of 9600 B.C. for the Berger Bluff Site, 41 GD 30 (Hester 1980:3), suggests an even earlier use of the Coleta Creek project area. All of these facts strongly suggest that archaeological work, including collecting by avocationalists, is extremely important. As Highley and Hester (1980:ii) have suggested, there continues to be a great need for site reports and data-oriented papers dealing with the archaeology of the central Texas Coast.

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SANDSTONE ARTIFACTS FROM WESTERN McMULLEN COUNTY, TEXAS:
THE BROMLEY COOPER COLLECTION

Courtenay J. Jones

ABSTRACT

This report provides a descriptive analysis of 98 sandstone artifacts associated with the Bromley Cooper collection, on loan to the Southern Texas Archaeological Association. Included in the collection are manos, metates, grooved sandstone abraders, two pestles, one pecked stone artifact and one sandstone artifact exhibiting a groove encompassing three of its four sides. Artifacts are grouped according to morphological characteristics and a brief discussion for each group is included. Measurement ranges and variations are also discussed. Some of the more interesting specimens are illustrated.

INTRODUCTION

The Southern Texas Archaeological Association has been instrumental in publishing data concerning sandstone and groundstone artifacts in South Texas. *La Tierra* has recorded sandstone and groundstone artifacts from Atascosa County (McReynolds 1981), Dimmit County (Hester 1979), Frio County (Hester and Funnell 1974), Kinney and Webb Counties (Beasley 1980) and Live Oak County (Warren 1975). Other *La Tierra* articles include artifacts from McMullen County (Hemion 1981, McReynolds 1981 and Mitchell 1975), Victoria County (Schmiedlin 1975) and Zapata County (Parker 1978). References to other *La Tierra* articles concerning groundstone and sandstone artifacts are included in the text. Hester (1980:115-120) provides an excellent overview of the functional and aesthetic aspects of groundstone artifacts in prehistoric South Texas.

Sandstone materials were readily available to prehistoric occupants of South Texas. Hester and Funnell (1974:24, 26) note the availability of sandstone materials in Frio County. Grant Hall (n.d.:229-230) mentions the Jackson Group, a sandstone formation which extends across McMullen and Live Oak Counties, as a possible source for sandstone artifacts recovered from the Choke Canyon Reservoir area.

This collection of sandstone and groundstone artifacts was assembled by Bromley Cooper as a result of ten years of surface collecting activities throughout West Central McMullen County, Texas. No other provenience information was available at the time of this writing.

During initial examination, 11 specimens were determined to be of natural origin and were excluded from this report. The remaining 87 specimens were grouped according to functional or descriptive characteristics and are discussed below.

All linear measurements (L=length, W=width, T=thickness) are expressed in centimeters (cm) and represent maximum values (i.e., an artifact with a thickness of 2 cm is not necessarily 2 cm thick at all points). Depth (D) measurements for metate depressions and any groove is expressed in millimeters (mm). Weights (WT) are expressed in grams (g) and are rounded to the nearest value. In cases where artifact orientation was not obvious (i.e., fragments, some abraders, etc.), the longest measurement was assigned as length. Measurements are discussed in general trends; however, specific measurements for a particular artifact are available from the editor of *La Tierra* or the author.

ANALYSIS

Metates

Eleven sandstone metates are included in this collection and were subdivided into two groups. Group A (4 specimens) metates exhibited one depression, while Group B

metates (7 specimens) exhibited two depressions each. One specimen (B3) had three depressions. Measurements for these metates were:

	<u>Group A</u>			<u>Group B</u>		
L	20	- 51	cm	30.5	- 58	cm
W	18	- 36	cm	20	- 33	cm
T	3.5	- 6	cm	4	- 6.5	cm
WT	2,000	- 8,700	g	3,000	- 12,500	g

The dimensions of the depressions were also recorded and are expressed below. Group B values reflect all 13 depressions associated with Group B metates.

	<u>Group A</u>			<u>Group B</u>		
L	17.5	- 24	cm	10.5	- 28	cm
W	10.5	- 12	cm	9	- 20.5	cm
D	4	- 15	mm	2	- 19	mm

The metates ranged in color from whitish grey to reddish brown and exhibited varying degrees of smoothness. Specimen B1 is illustrated in Figure 1,A.

Manos

Twenty-four manos are included in this collection and were grouped as follows:

Group A	Flat	8 specimens
Group B	Inclined	7 specimens
Group C	Plano-Convex	2 specimens
Group D	Miscellaneous	7 specimens

Measurements for Groups A, B, and C are:

	<u>Group A</u>	<u>Group B</u>	<u>Group C</u>
L	8.3 - 14.1 cm	7.6 - 15.8 cm	11.4 - 12.6 cm
W	7.8 - 12.5 cm	6.7 - 10.8 cm	7.3 - 9.5 cm
T	1.4 - 2.5 cm	2.7 - 4.5 cm	3.3 - 3.8 cm
WT	268 - 479 g	159 - 648 g	359 - 494 g

Specimens A1, A4, A5, A6, A8 and B1 exhibited smoothness on both of the flat sides, while the remaining specimens were smooth only on one side. Specimen C1 displayed smoothness on the convex side, while specimen C2 was smooth on the flat side. In addition, specimen A7 exhibited three sub-parallel incised lines on the side opposite the smooth side. Specimens A6, C1, and C2 were not complete but were readily identifiable as manos since only small fragments seemed to be missing. Specimen A6 was the only one which was perforated. Illuminated magnification failed to reveal striations or any other signs of drilling or working. Ken Brown (personal communication), Research Associate at the Center for Archaeological Research, suggested the hole was the result of material other than sandstone having been imbedded in the sandstone and subsequently eroded out.

Group D included seven miscellaneous fragments of sandstone which exhibited smoothness on one or more sides. The following dimensions were recorded:

L	2.1 - 10.9 cm
W	1.9 - 6.7 cm
T	.7 - 3.8 cm
WT	4 - 148 g

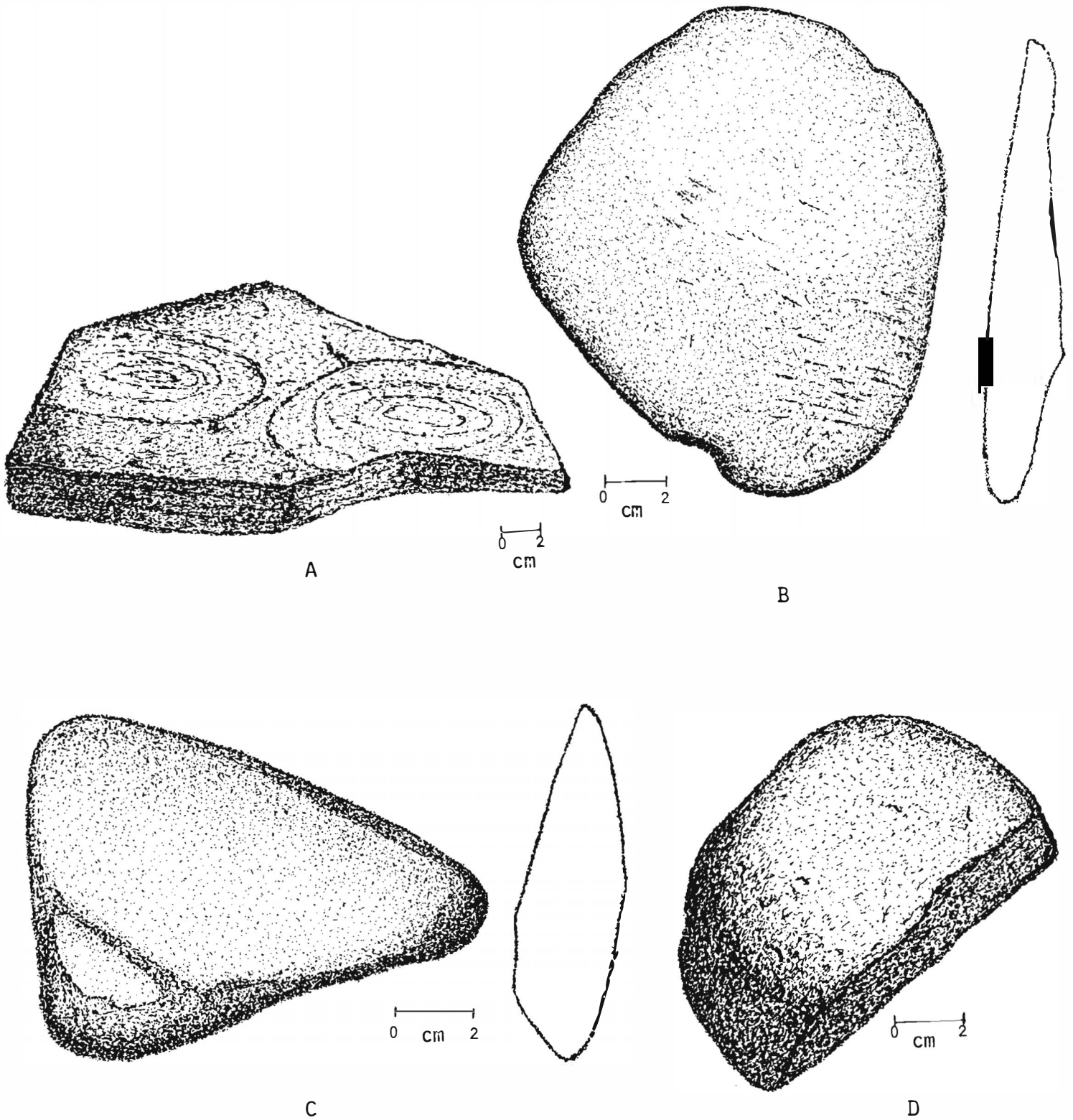


Figure 1. From the Bromley Cooper Collection. A, Specimen B1 metate; B, Specimen A2 mano; C, Specimen B3 mano; D, Specimen C2 mano. Note differing scales.

Specimens D2, D3, and D6 were smooth on both flat sides, while the remaining specimens were smooth on only one side. Specimens D1, D2, and D3 measured 1.6 cm, .7 cm and 1.3 cm thick respectively, and are believed to be mano fragments. Specimens D4 and D5 were both 2.8 cm thick and may be either mano or metate fragments. Specimens D6 and D7 are 3.7 and 3.8 cm thick, respectively, and are believed to be metate fragments. These determinations are speculative but are based on visual observations and comparisons with complete artifacts. Specimens A2, B3, and C2 are illustrated in Figure 1, b, c and d, respectively.

Grooved Abraders

The grooved abraders constituted the largest class of artifacts in this collection, totalling 47 specimens. The term "grooved abradar" was selected by the author for a variety of reasons discussed later. The term, however, can be considered synonymous with Warren's "sharpening stones" (1975:16) and "grooved pieces" reported by Hall, et al., n.d.:245). The incisions found in these abrading stones are thought to be the result of tool sharpening activities (Warren 1975:16, Hester 1980:115) where the tool was subjected to the abrasive surface of the sandstone cobble. Most abraders are fist-sized cobbles of varying shapes, but some are mano or metate fragments that have been reused as abraders. In this collection, specimens C2 and C10 appear to be such fragments. Hall, et al. (n.d.:245) report similar specimens in the Choke Canyon collection. One specimen in this collection (C13) is a relatively large (23 cm x 16 cm x 2.8 cm) sandstone slab.

The 47 grooved abraders were grouped according to the number and pattern of incisions they exhibited. Group A consisted of 18 unilinear (single groove) specimens. Group B consisted of 16 polylinear (multiple grooves) specimens which exhibited incisions on more than one face of the abradar, or which exhibited parallel or sub-parallel grooves on one or more faces. Group C consisted of 13 specimens which displayed grooves in a transverse linear (crossing/intersecting lines) pattern. This classification schema was selected to emphasize the groove pattern on the cobbles. The following measurement ranges were recorded. L, W, and T indicate length, width and thickness of the cobble or fragment itself, while Max.L, Min.L, Max.D, and No. refer to maximum length, minimum length, maximum depth and total number of grooves respectively.

	<u>Group A</u>	<u>Group B</u>	<u>Group C</u>
L	4.9 - 10.2 cm	4.4 - 9.2 cm	4.3 - 23.5 cm*
W	4.3 - 6.9 cm	4.0 - 6.9 cm	3 - 16 cm*
T	1.9 - 4 cm	2 - 3.7 cm	2.3 - 4.5 cm
Max. L	2.4 - 7.9 cm	2.7 - 6.8 cm	3.9 - 15 cm*
Min. L	N/A	1.8 - 5.5 cm	.9 - 6.5 cm*
Max. D	1 - 3 mm	1 - 5 mm	1 - 5 mm
No.	N/A	2 - 5	2 - 9

* Since specimen C13 is uncommonly large (tabular in shape rather than cobblelike), a more accurate range variation for Group C cobbles can be indicated by excluding the values for specimen C13. Group C measurements would then be reflected in this manner:

Group C (Without specimen C13)

L	4.3 - 10.5 cm
W	3 - 8.3 cm
T	2.3 - 4.5 cm
Max. L	3.9 - 8.1 cm
Min. L	.9 - 4.4 cm
Max. D	1 - 5 mm
No.	2 - 9

The color variation in the grooved abraders follows a wide range similar to the manos and metates. Colors ranging from greyish white, to tan, to reddish brown were observed.

An analysis of the groove patterns was made by orienting the specimen' length dimensions along a vertical axis. Most of the grooves were V-shaped although U-shaped grooves were not uncommon. Specimen A17 exhibited the widest groove (U-shaped; width 5 mm across the top). Although a few of the grooves trended along an East-West axis, the dominant orientation pattern was along a North-South axis with a small percentage of the grooves lying along Northwest-Southeast or Northeast-Southwest axes. The tendency for a North-South orientation was more apparent in Groups B and C. This may be due to the greater number of grooves in these groups.

Specimens B4 and C4 are illustrated in Figure 2, a and b respectively.

Pecked Stone

One pecked stone artifact was included in this collection. Designated PS1, this specimen is a pale tan color, trending to a grey color around the edges. Length, 51.6 cm; width, 6.9 cm; thickness, 2 cm; and weight, 85 g. The specimen is plano-convex in shape when viewed from the side. When viewed from the top, the specimen is sub-triangular in shape with a rounded point. Both side edges and the rounded point exhibit what appears to be the results of pecking activity employed to shape the specimen. The intended use of this specimen cannot be determined since this specimen appears to be the end fragment of a larger artifact.

Pestles

Two pestles are included in this collection, and measurement data are as follows:

	<u>P1</u>	<u>P2</u>
L	12 cm	12.9 cm
W (prox.)	4.8 cm	6.7 cm
W (dist.)	5.3 cm	5.6 cm
T (prox.)	4.9 cm	5.3 cm
T (dist.)	5.0 cm	4.1 cm
WT	552 g	538 g
Color	yellow	grey

Both pestles exhibit some degree of smoothness along the shaft extending to the proximal end. The distal end of both specimens are smoothed from use. Additionally, a groove extends across the distal end of specimen P1. No speculation is offered concerning possible functions of this groove. Specimen P1 is illustrated in Figure 2,c. Pestles, though not in bountiful supply, do occur in South Texas from time to time. Hester (1979:22) records a pestle from Dimmit County, Texas, and Parker (1978:17-19) records one from Zapata County, Texas.

Grooved Weight/Sinker

Specimen S1 is a sandstone cobble, grey with pinkish hues in spots. Its measurements are: L, 8.6 cm; W, 6.6 cm; T, 4.3 cm; WT, 251 g. This is the only specimen with a continuous groove encircling three sides. Visual observation suggests the groove extended in a circular fashion and formed a continuous ring around the cobble. However, the fourth side of the cobble is missing, having been fragmented away. Although crude in comparison to the "Waco Sinkers" described by Hester, et al. (1978:22-23); also see Mitchell 1975:10, Hemion 1980:30-33) utilized in Victoria, Goliad, Dimmit, Willacy and McMullen Counties, Texas, it appears that this specimen may have served a similar purpose and functioned as a sinker weight or a counterweight.

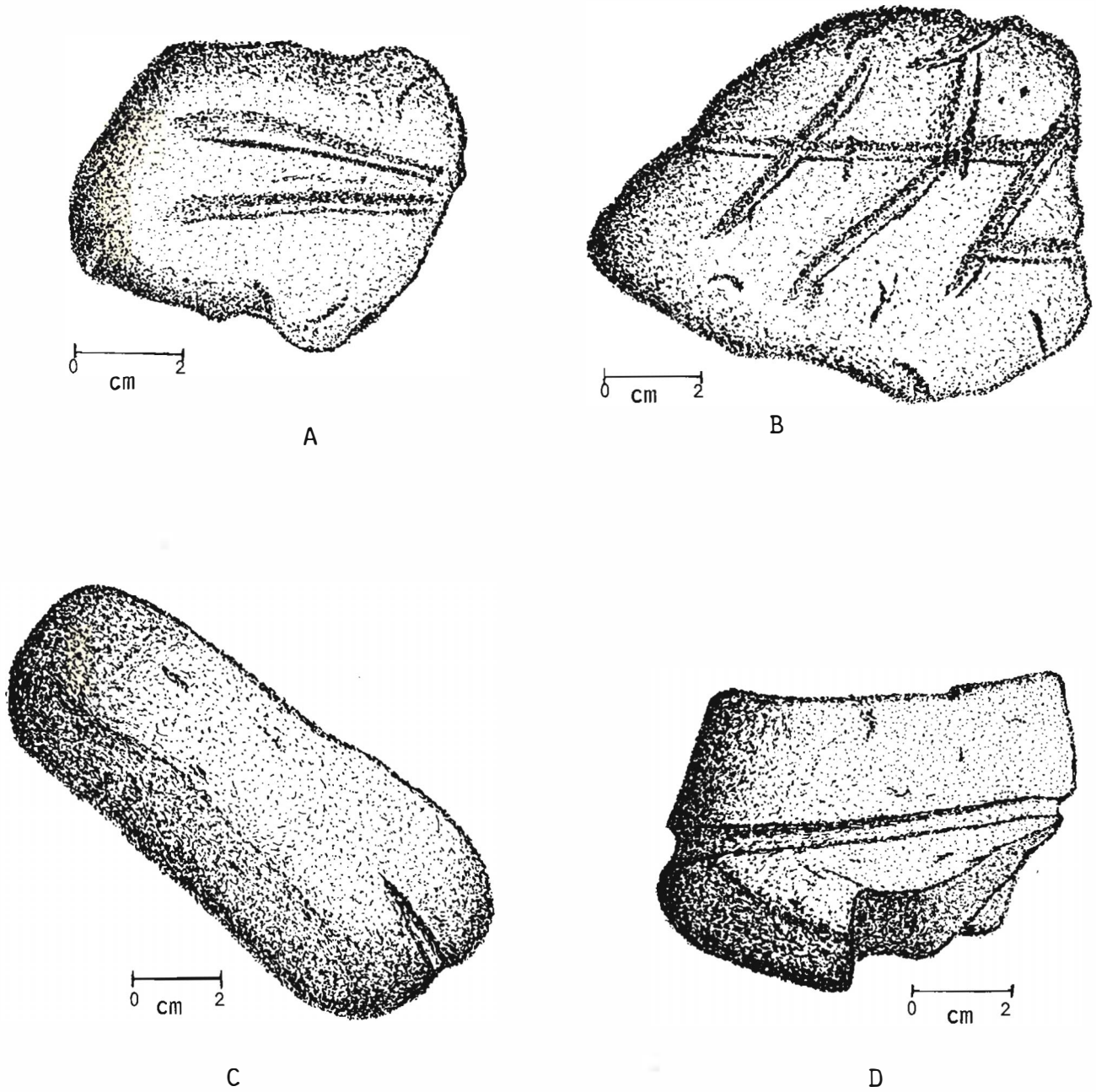


Figure 2. From the Bromley Cooper Collection. A, Specimen B4 grooved abradar; B, Specimen C4 grooved abradar; C, Specimen P1 pestle; D, Specimen S1 grooved sinker/weight. Note differing scales.

On the other hand, this specimen may have been a celt or hammerstone fragment, with the groove utilized in the hafting process. Schmiedlin (1975:19) reports such an artifact from Victoria County, Texas. Similar artifacts, found in Nueces and Dimmit Counties, Texas, have been recorded by Mitchell (1975:9). Specimen S1 is illustrated in Figure 2, d.

Miscellaneous

Specimen W1 is a greyish metamorphic schist, flecked with blackish grains. It is rectangular in shape, smooth and shiny on both flat surfaces and measures: L, 9.5 cm; W, 3.3 cm; and 1.7 cm thick on each end. Both of the flat surfaces are slightly concave, resulting in a mid-section thickness of 1.3 cm. From all appearances, it looks much like a honing stone used to sharpen metal tools, such as knives. Its weight is 129 g. Dr. Eric Swanson (UTSA Geology Department) identified this specimen as a type of schist characteristic of the Llano Uplift formation in the vicinity of Kerrville, in the Central Texas Hill Country (see also Girard 1964:4-5, 87). Dr. Swanson attributed the shiny appearance to the high mica content in the specimen. He stated that although the mica would render it too soft to be an ideal honing stone, it may have been used as such. Dr. Swanson felt that the specimen was too long in size to have survived any erosional/geological process that could have transported the specimen from the Llano Uplift area to the McMullen County area, since the "thin sheet" structure of the mica would cause it to fragment quickly if subjected to rough treatment. He felt that human transport was the most likely mode of transportation; however, whether this occurred (if, indeed, it did) during historic or pre-historic times cannot be determined (Dr. Eric Swanson, personal communication).

COMMENTS

In researching background material for this report, many sources referred to "grooved artifacts." This term was used in reference to celts, hammerstones and other such artifacts that often are grooved to facilitate hafting or mounting. This term was also used in reference to what are believed to be abrading stones, used in the preparation or maintenance of other tools. This latter class can be separated from the former, since these grooved cobbles do not characteristically exhibit circular grooves about the artifact. The term "grooved abrader" was selected for use in this report since it would conform to the generally accepted function of these tools and, at the same time, allow these tools to maintain some association with the technique of grooving. This terminology may be valuable in future studies of South Texas (and other areas) materials.

ACKNOWLEDGEMENTS

I would like to thank Jimmy Mitchell for bringing some sort of organization to this material, thereby increasing its value. Thanks also to Lynn Highley for "allowing" me to work with this collection, and for her guidance and suggestions. Most importantly, thanks to Bromley Cooper for making this collection available to the members of STAA. In doing so, he has helped each of us to learn more about prehistoric Texas.

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ALICE AND ROBERT BENFER are currently professors of anthropology at the University of Missouri - Columbia. During their days as students with the University of Texas at Austin, the Benfers were extremely active in South Texas archaeology, often working with John Greer to locate and investigate significant sites; they were the first to survey, excavate, and even obtain a radiocarbon date from the Hitzfelder cave in Bexar County. Currently, they are working mostly in Peru, but of course, they will always retain an interest in Texas archaeology.

PAUL J. COOK is known to most members of STAA as their treasurer from 1978 to 1981, and as the author of a summary of the history and archaeology of Mission Concepción (July 1980 *La Tierra*). Paul is currently a doctoral student at the Bowling Green State University in his native Ohio, where he is studying industrial psychology under Air Force sponsorship. Paul is already somewhat involved in Ohio archaeology and has sought out the local group. His address, for those of you who might like to write, is: 433 S. Grove St., Bowling Green, OH 43402.

COURTENAY J. JONES is an archaeology student at the University of Texas at San Antonio and a staff member of the Center for Archaeological Research Laboratory, working with Lynn Highley. Courtenay's April 1981 *La Tierra* article reporting his experiment involving a calcining process for acorns was extremely well received, so much so that Courtenay was pressed into repeating the experiment as a demonstration for those STAA members who attended the recent BBQ at the Cecil Peel ranch. It is rumored that Courtenay has developed so much confidence in his acorn processing hypothesis that he ate some of the deacidified acorn mush and was attempting to get others to have a bit as well. (Is that a true rumor, Courtenay?).

RICHARD McREYNOLDS is well known to most readers of *La Tierra* for his series of articles on Paleo-Indian materials from the San Miguel Creek area of South Texas and for his very excellent drawings of artifacts, both to illustrate his own articles and for other STAA members' articles. Richard also had a very excellent article in the January 1980 issue reporting the salvage of archaeological information from an *Edwards* point site in northern Bexar County, which illustrates the very valuable role of avocational archaeologists in capturing data which would otherwise have been destroyed.

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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Smitty Schmiedlin (Victoria)		