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Mission Concepcion

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Editor

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BOOK REVIEW

DIGGING INTO SOUTH TEXAS PREHISTORY

Thomas R. Hester, Corona Publications,
San Antonio, Texas, 1980

This exceptional volume, subtitled "A Guide for Amateur Archaeologists," has just been published by Corona Publishing Company of San Antonio. With a very thoughtful preface by John Graves, the book is both a handbook for amateurs and an extremely timely summary of South Texas archaeology. As such, it is a volume which should be in the library of every archaeologist in South Texas - indeed, every one in the state, both professional and amateur. It makes the interest which most of us have in archaeology seem so very legitimate and Hester has an uncondescending attitude toward collectors and amateurs which is very refreshing. It is the kind of volume which is greatly needed for every section of Texas and every area of the country.

After an initial chapter on archaeological field methods, Hester summarizes the cultural and environmental setting of South Texas and relates this area to the rest of the new world. He then discusses the historic Indians of the area; this is perhaps the most comprehensive ethnographic summary of South Texas yet published - the linguistic groupings in this region are now thought to be much more diverse than has previously been recognized.

Hester also devotes a chapter to the types of sites found in South Texas and gives very up-to-date information about each type, including work completed just this spring. In Chapter 5 he discusses and illustrates the major artifact types of the region; in Chapter 6 he summarizes 11,000 years of South Texas prehistory including displaying the known distribution of various types of Paleo-Indian and other projectile points. Finally, Hester devotes his closing chapter to a discussion of what needs to be done to preserve the prehistory of this area.

I could find only very few technical glitches in this magnificent work. Table 2.1 shows the Paleo-Indian period as 35,000 B.C. (it should be above the line opposite 10,000 B.C.). Artifact illustrations in Chapter 5 vary in scale which makes it difficult to maintain a true comparative perspective. Maps are of variable quality with the South Texas Site Map (page 5) being excellent, but Figures 2.1 and 2.2 are less than exciting - a good topographic map showing rivers and a map with more specific geographic regions (blacklands, mixed woodlands, etc.) would have been better...

Overall, I find this book to be one of the most exciting things to happen in South Texas archaeology since the birth of STAA. It does all of the things I have felt needed to be done (well...almost all); Southern Texas is defined as an area, a comparative chronology is developed, area point types are described and illustrated, the cultural history of the area is summarized, and on...and on...

Obviously, this is a book I highly recommend. It is available directly from the publisher, Corona Publishing Company, 1037 South Alamo, San Antonio, Texas 78210, and in better bookstores around town.

Buy it! I think you'll like it.

The Editor



CONCEPCION MISSION
SAN ANTONIO, — TEXAS.

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A REVIEW OF THE HISTORY AND ARCHAEOLOGY OF MISSION CONCEPCIÓN

Paul J. Cook

BACKGROUND

Mission Concepción, like its sister missions Espada and San Juan Capistrano, had its origins among the Indians of east Texas. Concepción was founded July 7, 1716 in a village of the Hasani Indians in Nacogdoches County. The east Texas missions were set up to counter French activities in the region (Tunnell and Newcomb 1969:143).

The founders of these missions were a hardy and devoted group known as the Franciscans. To the Franciscans the primary reason for establishing a line of missions was to bring Christianity and civilization to the natives of this new land. This was not the only function of the missions in the eyes of the Spanish colonial government, however. For years Spain had claimed the region of Texas but had not taken steps to colonize there until the French threatened to move in. Thus, the mission system also served a valuable role in occupying and stabilizing the territory (Clark 1980:3). The dedication and unselfish motivation of the Franciscans often insured the continuance of a missionary effort where more politically or economically oriented colonists would probably have failed.

Such was the orientation of the Franciscans who founded Concepción. These friars were members of the College of Santa Cruz de Querétaro, an organizational element of the church-state hierarchy dedicated to Christianizing the Indians. Fr. Isidro Feliz de Espinosa was president of the three Querétaran missions of east Texas and made his headquarters at Mission Concepción.

The initial mission facility was simply a wooden church and living quarters built by the Indians. Life for the missionaries in the initial years was difficult to say the least. They were too far from the other established missions to receive supplies, and severe drought conditions in 1717 and 1718 reduced the local food source drastically. Despite the scarcity of food and the ravages of disease, the mission succeeded in gathering some of the widely distributed Hasani Indians to the Christian fold and in fact had performed 62 baptisms by fall 1718 (Habig 1968:121).

Although the Franciscans endured diseases and shortages of food, they met a new obstacle in the summer of 1719 - the French. When news reached America that France and Spain were at war, the French seized the easternmost Spanish mission, San Miguel de los Adaes in Louisiana. Fearful that the French might advance west, the three Querétaran missions and the three Zacatecan missions, also in east Texas, retreated all the way to the presidio of San Antonio.

The missionaries joined the forces of the Marqués de Aguayo in May 1721 and departed San Antonio to return to east Texas. In August 1721 the main group of Aguayo's expedition reached Mission Concepción, the only mission still relatively intact. Following an impressive ceremony at Concepción on August 8, the missionaries set about reestablishing the missions and gathering back some 400 of their Indian friends (Chabot 1935:8).

The work of the Franciscans continued for the next several years until General Pedro de Rivera performed a bureaucratic maneuver on April 26, 1729, that resulted in removal of military protection for the missions. Shortly thereafter the three Querétaran missions petitioned the viceroy to either reestablish the presidio and its military constituent or allow the missions to relocate. The viceroy granted relocation and the three missions were moved to a new site by July 27, 1730 along the

Figure 1. Nuestra Señora de la Purísima Concepción de Acuña. Drawing by Harvey Smith, Sr., dated 1941. (Courtesy of Harvey Smith, Jr., who is currently cataloguing his father's archives, including materials concerning WPA work at the missions in the 1930s and restoration work at the missions in the 1950s.)

Colorado River near Austin. Again the Querétarans petitioned the viceroy for permission to relocate to a better site, and permission was granted. By March 5, 1731, the three missions found a permanent home along the San Antonio River.

HISTORY

Along with its new location, Concepción received a new name. The title "Nuestra Señora de la Purísima Concepción de los Hasani" was changed to drop "de los Hasani" and add "de Acuña" to honor the viceroy of New Spain, Juan de Acuña, Marqués de Casafuerte, who authorized the move.

In their new location the Franciscans began to build temporary facilities and sow crops. Since the mission Indians from the previous location stayed behind, new Indians had to be found. In March and April 1731 the Franciscans enticed nearly 1,000 Coahuiltecan Indians of the Pacaos, Pajalat, and Alobja or Pitalaques tribes to live at the three missions (Schmitz 1965:10). Campbell identifies these groups as Pacao, Pajalat, and Pitalac, who originally were from the vicinity of the confluence of the Frio and Nueces Rivers (Campbell 1979:43-43). The Pacao were distinct from the Pacoa who were present at the Guerrero missions in Coahuila, and Campbell observes that most Pacao were at Mission Espada with a few at San Antonio de Valero and Concepción (Campbell 1979:29). One Payaya woman, Josepha, a widow from Mission San Antonio de Valero, was at Concepción; in 1739 she married Juan Baptista who was previously an *alcalde* in the Concepción Indian village (Campbell 1975:14).

Several years were devoted to improving the mission facilities and educating the Indians in the Christian faith as well as more temporal skills. The years were also marked by a continuing battle with the authorities over military protection for the missions. For the most part, the authorities were either reluctant to supply soldiers or the soldiers were too sick or poorly equipped to be of much good protecting the missions against their most frequent antagonists - the Lipan Apaches. In 1743 Fr. Fernandez, President of the College of Querétaro, wrote to the viceroy and secured a commitment for competent military protection (Habig 1968).

In terms of the history of Mission Concepción, we are fortunate that Fr. Francisco Xavier Ortiz made an inspection tour of the San Antonio missions in 1745 for the College of Querétaro. His report showed considerable progress in converting Indians to Christianity and in mission construction. By this time a wall of stone and mortar had been built for protection and the granary and three stone houses had been erected. Indian huts of wood and thatch lined the compound walls. An irrigation ditch (*acequia*) was dug which ran from the river bend near the Alamo through the middle of the Concepción compound (See Fox 1979:Map 2). The church was made of adobe and the residence of the missionaries was a two-story stone structure. Work had begun on the new stone church.

Fr. Ortiz returned in 1756 and reported completion of the stone church. The church, dedicated on December 8, 1755, was constructed of adobe and small stones with a facing of stone on the visible walls. Fr. Ortiz described the front of the church in detail. He mentioned a portal of hewn stone between the two towers with a statue of Mary Immaculate in a niche above. In a smaller niche he mentioned figures of two angels holding a chalice with a host and a sun painted on one side and a moon on the other. Latticed windows at the base of each tower emitted light into a chapel dedicated to St. Michael and a baptistry. The entire façade sported painted geometric designs (Habig 1968:131-132). Mission Concepción must have been an impressive sight rising out of the green and brown of the Texas landscape.

Included in Fr. Ortiz' report were two buildings of stone and mortar serving as a granary and textile shop as well as buildings for blacksmithing and carpentry. Most of the Indian dwellings had been reconstructed of adobe. Work had begun on a new friary to have three private rooms and offices. Fr. Ortiz also reported that 700 head of cattle, 1,800 sheep, 12 pigs, and some horses were kept on the mission ranch. Not only had the missionaries been successful in building and ranching, they had managed by 1756 to baptize 653 Indians, marry 125 Christian converts, and bury 578 Indians in Christian ceremony. The Indian population in residence numbered 247.

Although 247 residents was not the maximum number of residents that ever lived at the mission, it was a greater number than the 207 Indians reported to the College of Querétaro in 1762. All of the missions faced similar reductions in numbers due to runaways and a lack of military escort for expeditions to recover them and recruit new converts.

In 1772 the administration of Mission Concepción was transferred from the Querétarans to the College of Zacatecas. The Querétarans moved on to replace the expelled Jesuits of Pimería Alta in northern Mexico. The Zacatecans were no more successful in expanding the mission population. In fact, Fr. López wrote in 1789 that only 71 Indians resided at Concepción. This decline came as a result of a decree by Commandant General Teodoro de Croix that all unbranded mission cattle were property of the government. The large mission herd was undoubtedly a big incentive to maintaining an Indian population, and with a substantial loss of cattle to the government there was a corresponding loss of Indian residents.

Fr. López, who was president of the Zacatecans at the time, gave a description of the wall surrounding the mission. He described three gates: one on the west, one on the south, and one on the east between the church and friary. The granary apparently served as part of the wall behind the church on the east wall.

The mission population continued to decline. By 1794 there were 16 men, 15 women, 1 boy and 6 girls. This year Mission Concepción was secularized. Secularization normally occurred when the work of the missionaries was done and the natives were fully civilized and Christianized (Schmitz 1965:18,22). In the case of the South Texas and Coahuila missions, secularization was more likely an economic and political decision (Clark 1980:6).

The remaining Indians were given mission property as their own and the missionaries were relieved of all duties other than pastoral and educational. A justice was appointed to tend to the other matters of community life. Not too long after the property was distributed, the resident missionary, Fr. Camarena, left. His duties were assumed by the resident missionary at San José. San José had been secularized too, so the missionary had the time to serve both mission communities.

The composition of mission residents changed over the next 15 years as evidenced in a June 1809 report by Governor Salcedo. Thirty-two Spaniards had moved to the mission, outnumbering the 21 resident Indians. Governor Salcedo described the mission landholdings as 38 square miles, running generally east and northeast of the mission compound. Three years later some of the mission land was set aside as a possession of the Villa of San Fernando.

Concepción existed as a sub-mission of San José until February 29, 1824 when it was turned over to the San Fernando Church. Few services had been held at Concepción in the preceding years, and in fact, a letter from the priest at San Fernando to the governor in 1820 referred to Concepción as abandoned. The property remained in this status until the land and all the buildings except the church were sold in 1831.

Although the role of missionary work had ended, history includes Mission Concepción in Texas' fight for independence from Mexico. Jim Bowie and his troops engaged Mexican forces about one quarter of a mile from the mission in the Battle of Concepción. On the morning of October 27, 1835, Bowie's force of 92 men was attacked by 400 Mexicans. The battle raged furiously for a short time, but the Texans had the advantage of good cover along the riverbank and repelled the attackers. The Texans lost only one man. After this engagement the Texan forces took up a new position closer to San Antonio and ultimately chose the Alamo as their stronghold (Chabot 1935:41-43).

Years later, in 1841, the new Congress of the Republic of Texas deeded the mission properties to the Catholic Church. Concepción was not to become a religious center, though. The church became a cattle barn for the nearby settlers. The army moved in some time around 1849 and used the church briefly as a supply depot.

Plan of Excavations and Map of Site

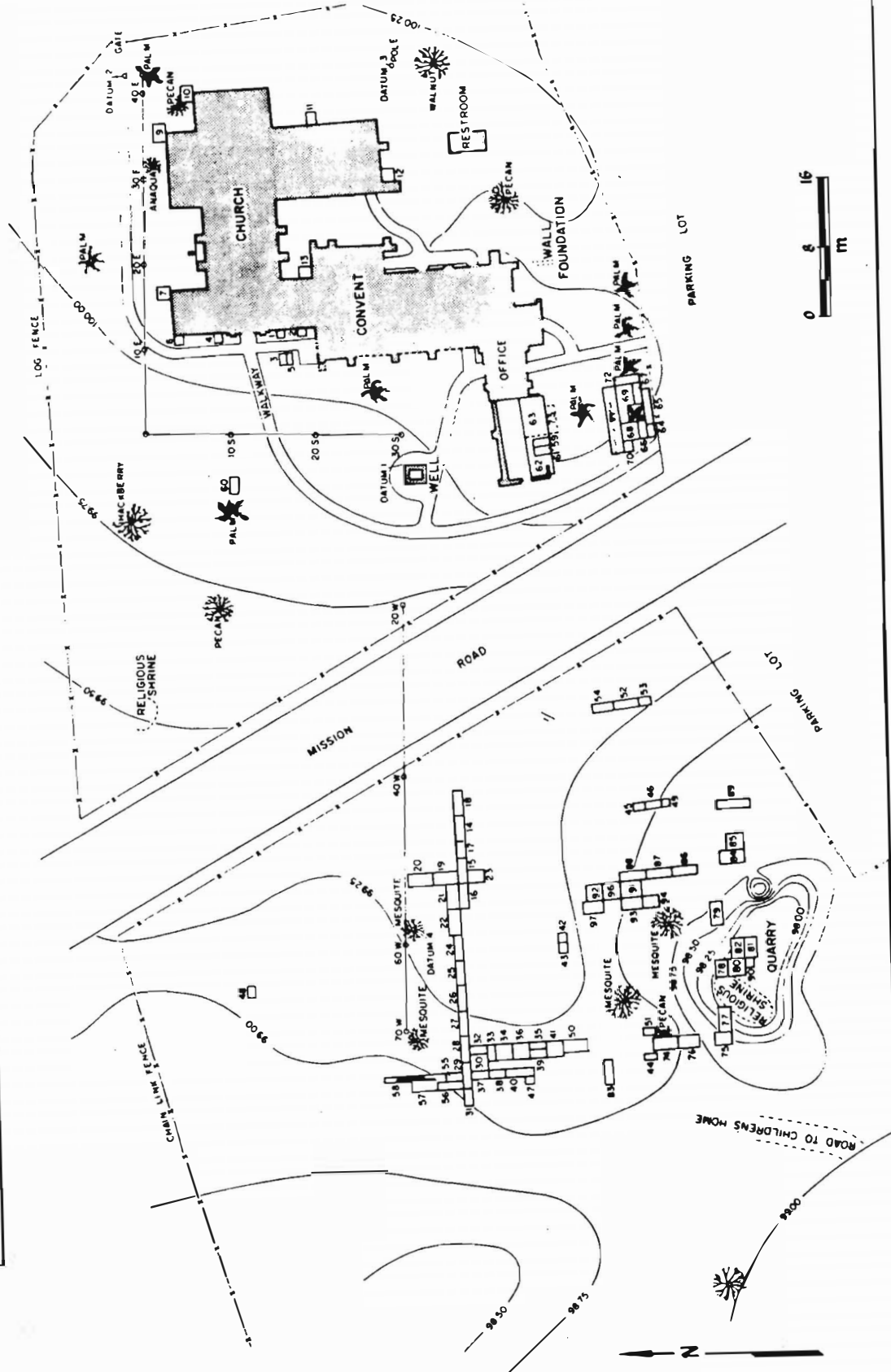


Figure 2. Site Map of 41 BX 12, Mission Nuestra Señora de la Purísima Concepción de Acuña. (Adapted from Scurlock and Fox 1977, Figure 10, with permission of the Office of the State Archeologist, Texas Historical Commission, Austin.)

Eventually the church was to become a place of worship again. In 1855 the Catholic Bishop allowed the Brothers of Mary from St. Mary's School to use the property as a farm. Title was officially transferred to the Brothers on September 8, 1859, and they purchased 100 additional acres. Finally, on May 28, 1861, the church was blessed for worship. The brothers opened a postulate and novitiate for training of candidates to the Society of Mary. The serene atmosphere and rural location served the Brothers of Mary as a summer retreat.

The farmlands were leased in 1869, but the church remained active. Some restoration took place, and on May 2, 1887, the church was rededicated in honor of Our Lady of Lourdes. The Brothers of Mary owned the mission until 1911 when they returned the property to the bishop. St. Peter's-St. Joseph's Home, an orphanage, was established. In 1920, St. John's Seminary was opened on the grounds. Another building was added to St. John's in 1935, and a third in 1947.

Today Mission Concepción is again served by the brown-robed Franciscans, as are the other missions except the Alamo (Watkins 1980). Concepción still serves as a religious center, and mass is offered each Sunday at 8:30 A.M. As a historical site, the mission is open to the public every day from 10:00 A.M. to 6:00 P.M. for a slight charge. Mission Concepción and the other missions (except the Alamo) are under the control of the Archdiocesan Director of Old Spanish Missions. Profits from admissions and gift shop sales are used for maintenance and restoration of the missions.

ARCHAEOLOGY

Although the WPA uncovered several wall foundations during repair of the church in the 1930s, only one extensive archaeological investigation has been conducted at Mission Concepción. In the fall of 1971 and spring of 1972, crews directed by Dan Scurlock of the Texas Historical Commission conducted excavations with three purposes in mind. First, they wanted to gather data on the effects of moisture on the foundation walls of the buildings. The façades of the existing walls have been progressively deteriorating, with the hypothetical cause being ground moisture. Test pits dug along the church wall on the west revealed a dry foundation. The source of the moisture was determined to be from the watering of plants on the mission grounds (Scurlock and Powers 1975; Olsen and Tunnell 1975).

The second purpose was to locate the western compound wall and other features. Test pits were dug in the fall of 1971 to select sites for further investigation. The majority of the testing was done west of Mission Road with some test pits around the quarry site and on the south of the compound between the parking lot and office (Scurlock and Fox 1977).

The third objective was to recover artifacts for comparison with those of the other San Antonio missions. All excavated soil was screened and the artifacts catalogued by location, provenience, date of excavation, etc. Detailed records were kept of all features, and an extensive photographic record was made of all phases of the investigation. These data were used for an extensive comparison of the lithic artifacts at a number of Spanish missions (Fox 1979).

In all, 17 features were identified at Mission Concepción from the various test pits (Scurlock and Fox 1977). The first feature reported was that of the church foundation. It is described as an average 1.12 m deep composed of varying sized pieces of unshaped limestone joined by lime mortar. For the most part the foundation extends outward from the main wall about 25 cm. As already mentioned, the lower foundations were basically dry and solid.

Feature 2 was located on the north wall of the church between the two outside nave wall buttresses (Pit 8 in Figure 2). In this excavation a light tan plaster floor was encountered with a rectangular pit in the center. Excavation of the pit revealed a badly deteriorated 19th century burial. The burial was left in place.

The rest of the features identified revealed a variety of prehistoric and historic artifacts and information about the living areas and walls of the mission compound. These are the highlights of the features:

1. Test Pits 1, 2, 4, 6-10 along the foundations of the church (See Figure 2).
2. Test Pit 8. Plaster floor and burial (discussed above).
3. Test Pit 9. An extensive midden at the northeast corner of the church. Many artifacts were recovered.
4. Test Pit 12 at the south of the sacristy revealed a clay floor and three possible post molds.
5. Test Pit 13 under the stairwell leading to the south bell tower. Many artifacts, animal bones and charcoal suggest a midden and possible hearth.
6. Test Pits 14 and 17 west of Mission Road revealed European and Indian artifacts.
7. Test Pits 19, 20 and 21 revealed similar artifacts as Feature 6 and could be part of the same midden.
8. Directly west of Feature 6 in Test Pits 25 and 26 was an accumulation of late 19th and early 20th century artifacts suggesting a dump site.
9. Test Pits 28-30 and 32-40 revealed extensive limestone rubble and travertine bedrock. The rubble probably came from the quarry area directly south.
10. Test Pits 42 and 43 north of the quarry several meters east of Feature 9 exposed another midden.
11. Test Pit 44, northwest of the quarry a short distance yielded numerous animal bones and colonial and post-colonial artifacts.
12. Test Pits 57 and 58 at the western edge of the midden areas described as Features 6-9 revealed two aligned sections of wall. The wall remnants were made of irregularly shaped limestone rocks. The distance of the front of the church to these wall sections is 88 meters.
13. Near the present office in Test Pits 59 and 61 a section of wall was located. It was constructed of adobe or sun-dried bricks and was associated with a plaster floor.
14. Test Pit 62 revealed the corner of the wall identified in Feature 13. Numerous artifacts from the late 19th and early 20th centuries were recovered along with abundant ash and charcoal.
15. Also in Test Pit 62 at the eastern edge, a plaster floor was uncovered. This floor may or may not have been part of Feature 14.
16. A feature was located in Test Pits 64-72 south of the office next to the parking lot. A wall and two plaster floors were identified. The floors probably represent Indian dwellings that lined the inside of the compound wall.
17. Test Pits 75-82 and 90 were in the quarry itself.

An impressive total of 12,194 artifacts were catalogued during this archaeological investigation. Also, 14,164 faunal remains were recovered. The artifacts collected were similar in type and number to the artifacts recovered in excavations at the other San Antonio missions. The investigation report gives a detailed listing of all artifacts by type with cross tabulations by vertical and horizontal distribution (Scurlock and Fox 1977); for the sake of brevity, only the totals by general type are reported here.

CERAMICS			
	Earthenware	4,325	
	Stoneware	369	
	Porcelain	50	
	Miscellaneous	179	
	Total	4,923	4,923
GLASS			
	Containers	1,313	
	Container Accessories	99	
	Personal Items	87	
	Miscellaneous Forms	2,178	
	Total	3,587	3,587
METAL			
	Personal Items	58	
	Firearms	27	
	Household Items	29	
	Containers and Accessories	65	
	Tools	7	
	Equestrian/Farm Equipment	20	
	Machine Parts	33	
	Building Hardware	1,119	
	Miscellaneous	823	
	Total	2,181	2,181
LITHIC			
	Cores	14	
	Flakes and Chips	913	
	Bifaces	35	
	Gunflints	7	
	Thermally altered stone	363	
	Miscellaneous Stone	3	
	Total	1,335	1,335
SHELL ARTIFACTS		77	
BONE ARTIFACTS		27	
CLOTH		2	
PLASTIC		41	
MISCELLANEOUS		21	
	Total	168	168
	Total		12,194

Table 1. Artifacts recovered during excavations at Mission Concepción.
(Scurlock and Fox 1977)

CERAMICS

Of the 4,923 ceramic artifacts, 4,325 specimens were earthenware and included both Indian and European-made pottery. The bulk of the collection was a bone-tempered earthenware typical of central and southern Texas mission sites which was probably made locally. Thirteen specimens were decorated including ten asphaltum-stained sherds and two sherds with incised lines. Scurlock and Fox (1977:55) concluded that while painted decoration is seldom reported on bone-tempered wares, asphalt coating or decoration occurs at a number of Texas mission sites. Most of the bone-tempered ceramics (2,868) were undecorated and are very similar to pottery samples reported from other San Antonio missions.

Twenty-one specimens of a Burnished Red earthenware were recovered. This type of ceramics is found commonly at Spanish Colonial sites in Texas and was probably manufactured in Mexico (Tunnell and Newcomb 1969:105).

The remaining ceramics included pieces of Spanish, English, oriental, and American manufacture. More complete descriptions of these artifacts can be found in Scurlock and Fox (1977).

LITHICS

Some of the lithic artifacts recovered at Mission Concepción are illustrated in Figures 3 and 4. Fox (1977) made a comparative study of lithic materials from the San Antonio missions, including a sample of the artifacts recovered at Mission Concepción. Previously, most investigations reported lithic materials recovered, but no intensive effort had been made to interpret the use of the materials or to specify their origins. Fox compared five collections from the San Antonio missions on a variety of morphological characteristics. Most of these characteristics of lithic materials appeared in each collection, suggesting that the lithic sample studied (2,329 artifacts) was representative of the Spanish Colonial period.

Two types of lithics that occur commonly and which may be diagnostic of the Spanish Colonial period are gunflints and strike-o-lites (see Figure 3 f,g) and small, thin (2 to 4 cm) bifaces or mission arrow points (Figure 3, a-e). Other lithic artifacts such as core-tools and thick bifaces are of more questionable origin. Fox concluded that of the collections studied, the artifacts from Concepción have the greatest probability of contamination by prehistoric lithics. Whether the Concepción site was built over a prehistoric site or whether the mission Indians were using their prehistoric technology in their flint knapping is not known. It is also possible that some prehistoric materials were collected by the mission Indians for further use or refinement (Fox 1979).

The appearance of thick bifaces or *Clear Fork* tools (see Figure 4, a,b), which is usually associated with Archaic and Late Paleo-Indian sites (Hester, et al. 1973; McReynolds, et al. 1980), suggests that the Concepción site had a long history of use before the missionaries arrived. An interesting alternative suggestion might be that the *Clear Fork* tool may be a form which was used much later than generally believed; this is a point which probably needs to be investigated further.

Fox (1977) also compared the lithics from the San Antonio missions with collections from other Texas and Mexico missions. Again, gunflints, strike-o-lites, and small, thin bifaces were commonly found. The general appearance of other lithic materials suggests an emphasis on flake-tool production at the missions over thin biface (arrow point) production. In all, the comparative study did not indicate any clear pattern of other lithic types which were unique or unquestionably representative of the Spanish Colonial period. However, the study was an important step in solving the puzzle of lithic origins at Concepción and the other San Antonio missions.

BONE AND SHELL

A variety of bone and shell artifacts were recovered at Mission Concepción. Shell artifacts recovered included an *Olivella* shell bead and a concho or disc shell

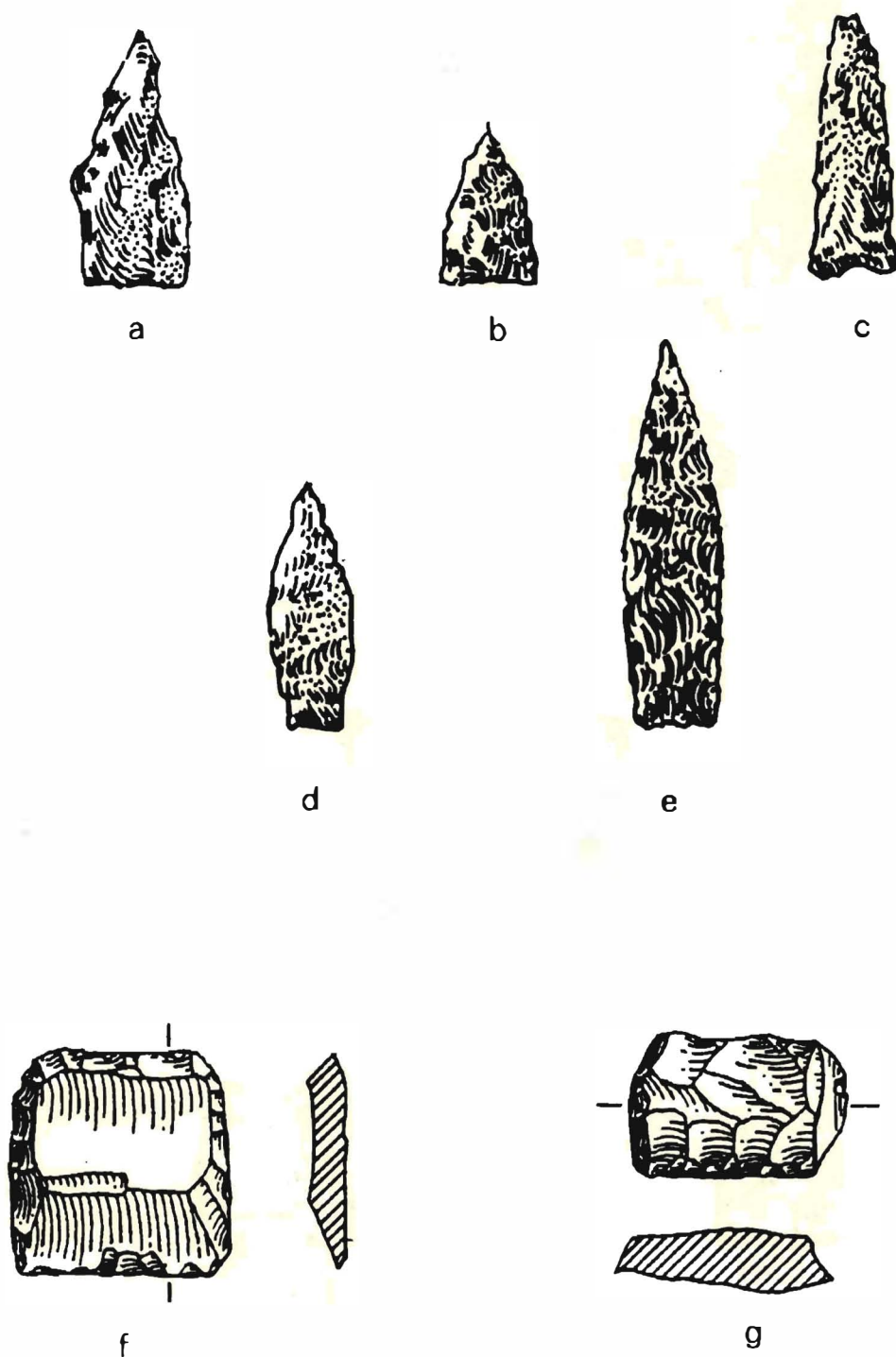


Figure 3. Possible Spanish Colonial Period Lithic Materials: a, perforator or drill; b-e, thin bifaces (arrow points); f, gunflint (European flint); g, possible gunflint. (a-e adapted from Scurlock and Fox 1977:Figure 34; f-g from Fox 1979:Figure 11).

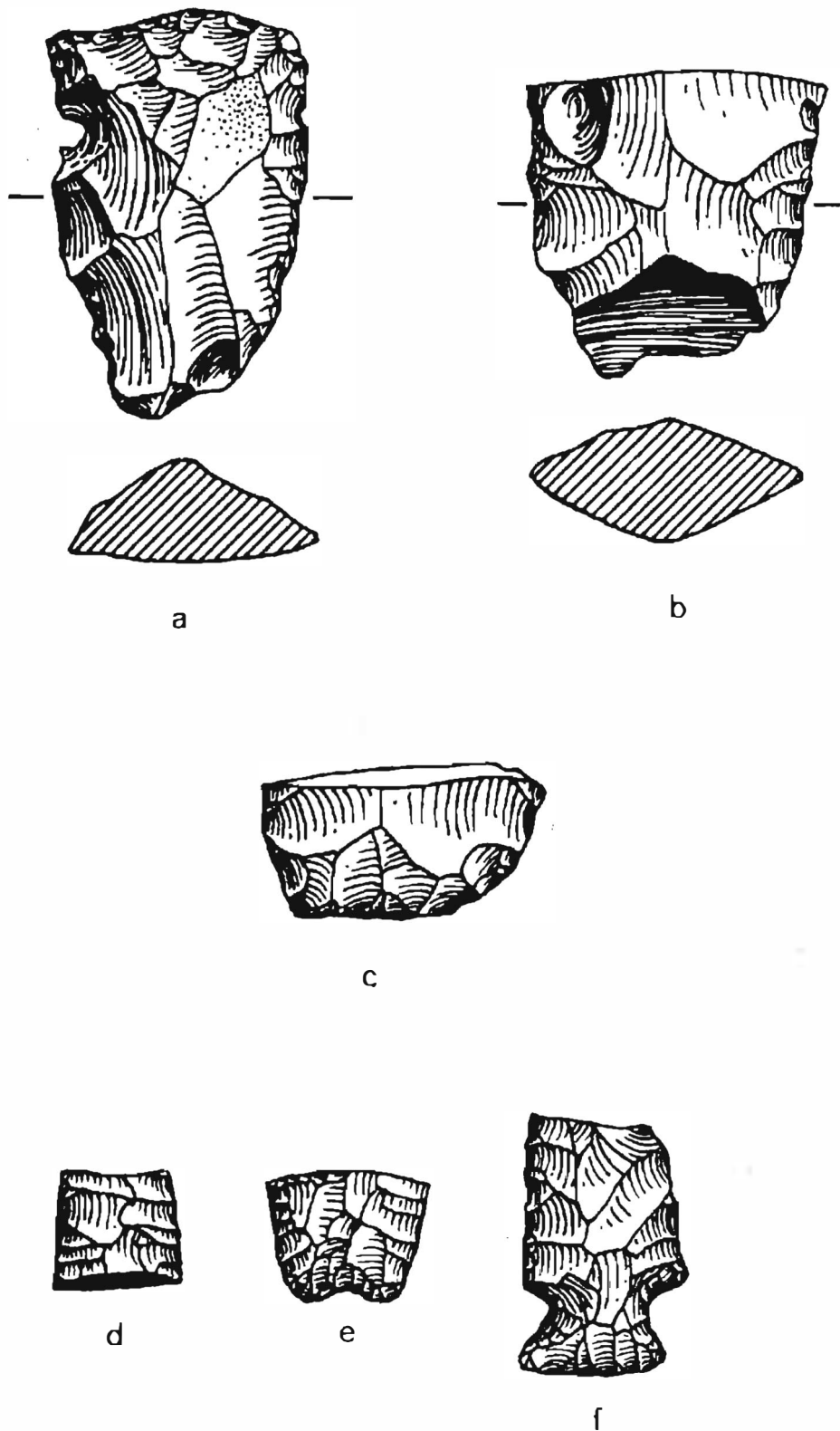


Figure 4. Bifaces from 41 BX 12, Mission Concepción: a-b, *Clear Fork* tools; c-f, thin bifaces, including dart point fragments. (Adapted from Fox 1979:Figures 9 and 10).

bead made from freshwater mussel shell (Figure 5, a). One of the most interesting finds included two crosses carved of bone (Figure 5, c) which are similar to a cross found by Gilmore (1969) at the San Xavier missions in central Texas. Bone buttons, pins, and beads were also recovered as well as two notched teeth (nonhuman).

FAUNAL MATERIALS

Faunal remains included 3 fish scales, 1 antler tine, 110 mussel shell fragments, a representative sample of snail shells, and 14,026 specimens of bone. A detailed description of the bone materials is found in Scurlock and Fox (1977:Appendix I). Domestic animal remains comprised 14 percent of the recovered specimens. Wild animals that served as a food source, such as squirrel, deer, fish, turkey, turtle, etc., comprised 24 percent of the total. The remainder of specimens were presumably non-food species such as birds, rodents, reptiles, carnivores, etc. One speculation is that many of the rodent and bird remains resulted from owl predation (Scurlock and Fox 1977). For several reasons, it is difficult to offer an exact interpretation of mission life based on the faunal remains.

DISCUSSION

Although only one major archaeological investigation has been conducted at Mission Concepción, a lot of progress has been made in terms of understanding the archaeology of this important mission site. The investigators prepared detailed maps of structures and features as well as architectural drawings and measurements of the buildings. An extensive photographic record was made of the excavations, buildings, and the decorations that still existed on the walls of the buildings. A large number of artifacts were collected and analyzed. Excavations demonstrated that the deterioration of the lower façade walls was primarily due to surface watering and that the foundations themselves were dry and solid. Many architectural features were recorded, and damage resulting from modern decorative plants on the grounds was revealed. The source of material used in building the church was located in a quarry to the west of the mission compound (see Figure 2). Finally, the westward extent of the compound was tentatively located.

The location of the west wall demonstrates that some of this archaeological site is presently under Mission Road. This finding suggests the need to reroute the road to the west so that the mission site can be properly studied and restored to its earlier configuration. While there are many problems associated with relocating the road, hopefully city or federal officials will recognize the importance of the Mission Concepción site and will relocate the road outside the compound. Hopefully, the land containing the rest of the mission compound located to the west of Mission Road can be acquired and the entire mission site can be investigated in greater detail.

This site is of major importance. Much of the site is relatively intact; Mission Concepción has not suffered the encroachment of commercial establishments, as was the case at San Antonio de Valero. By remaining church property and relatively rural, much of the site has been restricted and retains its potential to provide a great deal of information about early mission life. The Indian quarters on the west side of Mission Road need a systematic, large-scale investigation, as does the quarry area; these areas should be restricted to the public until such investigations have been completed. The development of the San Antonio Missions National Historic Park (National Park Service) is a major step toward realizing the archaeological potential of the mission. As noted by Clark (1980) however, a comprehensive, long-term archaeological plan is needed.

Even from the limited amount of information available to date, we know a lot about the history of Mission Concepción. The church is recognized as the oldest, best-preserved mission church in Texas, and it stands as a marvelous tribute to the dedication of the missionaries and the Indians who built it.

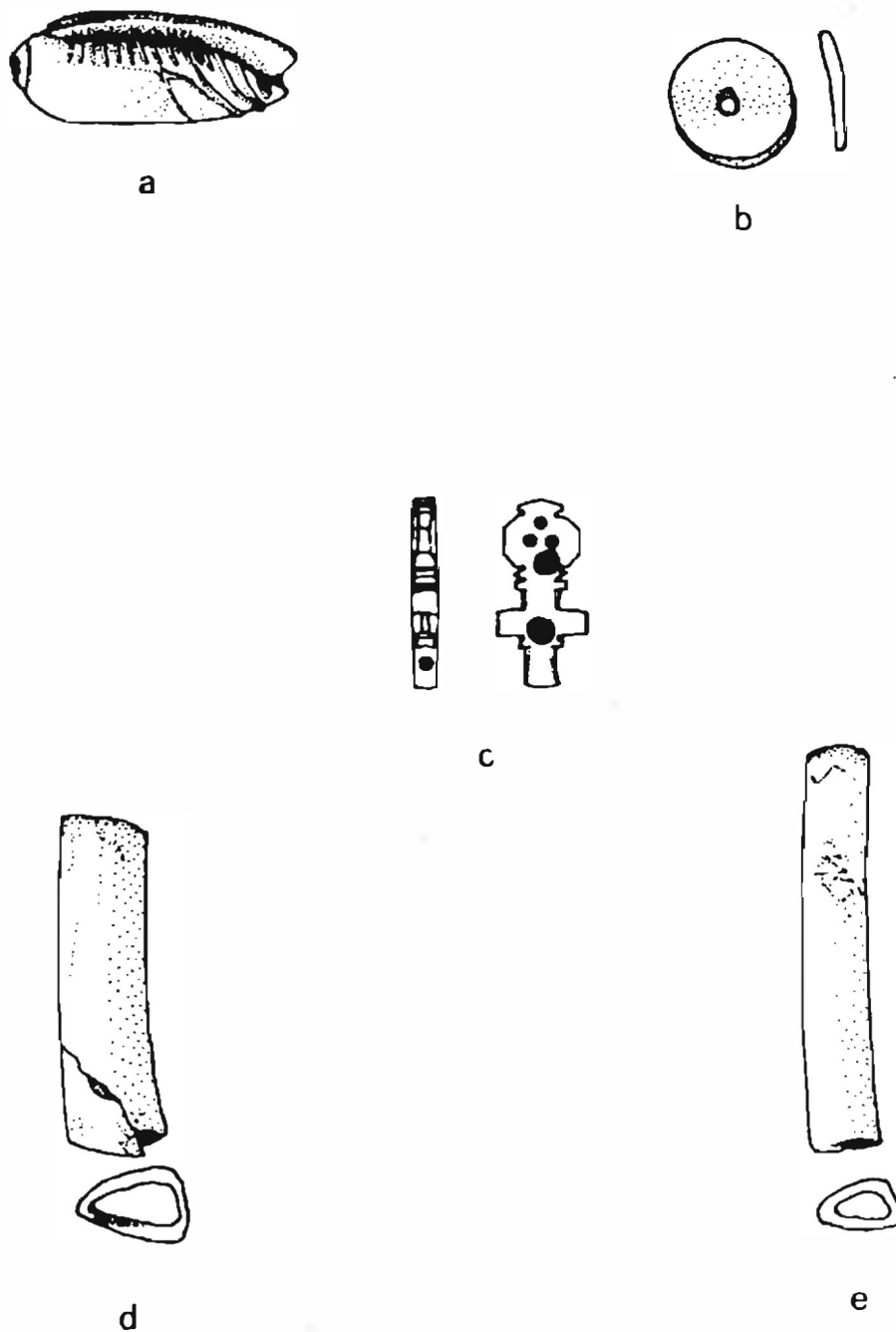


Figure 5. Shell and Bone Artifacts from Mission Concepción: a, *Olivella* shell bead; b, Concho or shell disc bead; c, Carved bone cross; d-e, Bone beads. (Adapted from Scurlock and Fox 1977:Figure 35, courtesy of the Office of the State Archeologist).

ACKNOWLEDGEMENTS

The author would like to thank Curtis Tunnell and the Texas Historical Commission for permission to use illustrations and other materials from the THC Concepción report (Scurlock and Fox 1977). Thanks also to Dr. Tom Hester of the University of Texas at San Antonio Center for Archaeological Research (UTSA-CAR) for granting permission to use illustrations from the Fox (1979) study of mission lithics. Harvey Smith, Jr., provided his father's drawing of Mission Concepción for use as a frontispiece for this article, and Pete DeVries, Old San Antonio Mission office of the San Antonio Archdiocese, assisted in locating some reference materials. Finally, my thanks to Anne Fox, UTSA-CAR, for her guidance and assistance on this project.

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COVER ARTIST

Rose Marie Siebenhausen

The view of Mission Concepción shown on the cover of this issue is the work of Rose Marie Siebenhausen, a well known San Antonio artist. She holds membership in the Fine Arts Association, Metropolitan Art League (Victoria), River Art Group, and the Helotes Art Guild.

A native of Dallas, Rose Marie has been interested in art since childhood and has continued to develop this talent through study and application. She attended Victoria College, Dominican College of Houston, and Incarnate Word College, at which she received her B.A. in Art.

Notecards showing this cover scene and other San Antonio Missions by Rose Marie Siebenhausen are available at:

San José Gift Shop
Institute of Texan Cultures
River Art Gallery, La Villita
Frost Brothers

or from the artist:

254 Rosemont
San Antonio TX 78228

A BRIEF REPORT ON THE ANTHON SITE (41 UV 60)

Frank A. Weir and Glen H. Doran

INTRODUCTION

The Anthon Site (41 UV 60) is a prehistoric habitation site located on the Nueces River southwest of Uvalde, Texas. The site was discovered in May of 1974 during a routine Department of Highways survey of Farm to Market 481. A test of the Anthon Site revealed significant Late Prehistoric and Archaic occupations. Excavation under Antiquities Permit No. 88 was undertaken in July 1975 and continued through October of that same year. This report is a very brief summary of a more thorough report soon to be available from the Texas Department of Highways and Public Transportation, Austin, Texas.

DESCRIPTION AND OVERVIEW OF THE SITE

The Anthon Site is located in southwestern Uvalde County, Texas, on the second terrace of the Nueces River. It covers approximately two acres about 2,000 feet from the present river course. Geomorphic evidence and supporting evidence from the analysis of snail remains by Dr. Raymond Neck, Texas Department of Parks and Wildlife, indicate a gradual westward migration of the Nueces riverbed from the site since its first occupation, roughly 4,000 years ago. The earliest occupation of the site was during the Middle Archaic. It is representative of the Round Rock Phase in the central Texas sequence (Weir 1976). This occupation contained hearths, several of which rested directly on stream gravel and produced a carbon date of 3520 ± 60 B.P. (TX 2422). Associated material in this and later occupations representing the San Marcos and Twin Sisters phases and the Late Prehistoric included cores, debitage, utilized flakes, unifaces, dart points, arrow points and nonprojectile point bifaces. Two burned stumps, one from the Round Rock Phase level and one from the San Marcos level, provided excellent carbon dates: 3120 ± 70 B.P. (TX 2385) and 1580 ± 60 B.P. (TX 2378) respectively.

Preservation of faunal material was poor and little skeletal material was recovered. The discovery of the remains of a young *Canid* sp. in Late Archaic levels hints at least some occupation occurred in the Spring, assuming most whelping occurred in the Spring. Snail shells were well preserved and provided valuable interpretative support data. The botanical content of the soil averaged only 0.8% making pollen analysis impractical (Personal communication, Bryant 1977).

As the Nueces River changed its channel westward, the human occupations continued even though the environmental setting of the site was changing. The earlier gravel bar/river border environment gave way to later riverine and woodland environments. The Late Prehistoric occupations (Figure 1), noted by the appearance of arrow points, a change in hearths morphology and concentration of hearth debris, coincided with the environmental shift from woodland to a savannah type setting. During the Archaic, hearths had been well defined, smaller and spatially distributed (Figure 2). In the Late Prehistoric the hearths were spaced more closely together and were composed of more thoroughly fire fractured rocks. Burned rocks seemed more abundant and were concentrated within a limited area of the site. These later hearths and deposits had a much higher ash content than the earlier hearths, a difference which is possibly a direct reflection of the difference in age and resultant differential preservation. The spatial concentration of the hearths and the amount of scattered burned rock might also suggest a change in technique of food preparation during the Late Prehistoric period. Possibly the vegetal material which may have been cooked in these hearths was more immediately available in the vicinity of the site since savannah conditions prevailed.

Five soil strata were identified at the Anthon site. Beginning at the top, Stratum I is a loosely packed gray soil with a high ash and burned rock content. It extends from the surface to 0.5 ft. This stratum most strongly represents the Late Prehistoric occupations containing 84% of the arrow points found. Stratum II is dark brown and gradually lightens to a light brown as depth increases. This zone extends from 0.5 ft. to about 2.0 ft. below the surface and produced material representing the Twin Sisters Phase. There were no dense accumulations of fire cracked rocks as observed in Stratum I. Stratum III is much lighter in color and is roughly 1 ft. thick and extends from approximately 2.0 ft. to 3.0 ft. below the surface. The upper portions of the stratum produced San Marcos Phase materials and the lower quarter produced Round Rock material. Stratum IV is dark with an increased carbon content and is roughly 1 ft. thick. This zone is very discrete and totally representative of the Middle Archaic. In the lower extremities of the stratum lenses of stream gravel were occasionally encountered. Several of the Round Rock age hearths had been built directly on these gravel lenses. Stratum V is a lighter tannish gray soil interspersed with numerous gravel lenses. This stratum extends at least to 5.5 ft. below the surface. No occupational remains were found below 4.25 ft. and Stratum V was essentially sterile except for intrusive material from Stratum IV.

RADIOCARBON DATES

A total of nine radiocarbon dates were obtained. The one carbon date definitely associated with *Scallorn* arrow points dated 830 ± 70 B.P. (TX 2838). Two dates probably relating to the termination of the Twin Sisters occupations are 800 ± 50 B.P. (TX 2443) and 680 ± 50 B.P. (TX 2444). Two dates coming from hearths associated with San Marcos Phase artifacts are 1640 ± 60 B.P. (TX 2384) and 1580 ± 60 B.P. (TX 2378). Dates from Round Rock Phase features are 3000 ± 60 B.P. (TX 2381), 3120 ± 70 B.P. (TX 2385) and 3520 ± 60 B.P. (TX 2422). One carbon sample found in what was thought to be Round Rock Phase context may be intrusive and should be ascribed to San Marcos occupations since it was dated at 2210 ± 60 B.P. (TX 2380). [Ed. Note: The Late Prehistoric date at the Anthon site is generally consistent with those reported by Hester (1971) at the La Jita Site in northeastern Uvalde County. A terminal Twin Sisters date of A.D. 1270 appears too late in light of the La Jita sequence. However, Weir and Doran's dating of the San Marcos and Round Rock Phases appears more realistic than Hester's dating of the Middle Archaic circa A.D. 100.]

FEATURES

In all, 36 scattered and intact hearths were found. Most hearths were roughly circular and were either basin shaped or flat. No striking differences in hearth morphology was noted through time except that the number of flat or "pancake" hearths tended to occur more often in the Late Prehistoric. The Late Prehistoric hearths were concentrated in a smaller area of the site while Archaic hearths occurred more randomly throughout the site.

THE ARTIFACTS

Over 100 projectile points were recovered (Figure 3). Following the central Texas phases as described by Weir (1976), the dart points representative of the Round Rock Phase are *Pedernales*, *Kinney* and *Anthon* (a proposed new type). *Montell*, *Marcos*, *Marshall*, *Williams*, and *Castroville* represent the San Marcos Phase. *Ensor*, *Frio*, *Figero*, and possibly *Paisano* occur in the Twin Sisters Phase. *Scallorn*, *Edwards*, *Perdiz*, and various arrow point preforms represent the last occupation of the site which was during the Late Prehistoric. *Plainview* and reworked Paleo-Indian points were found in the Late Prehistoric levels and clearly were brought onto the site.

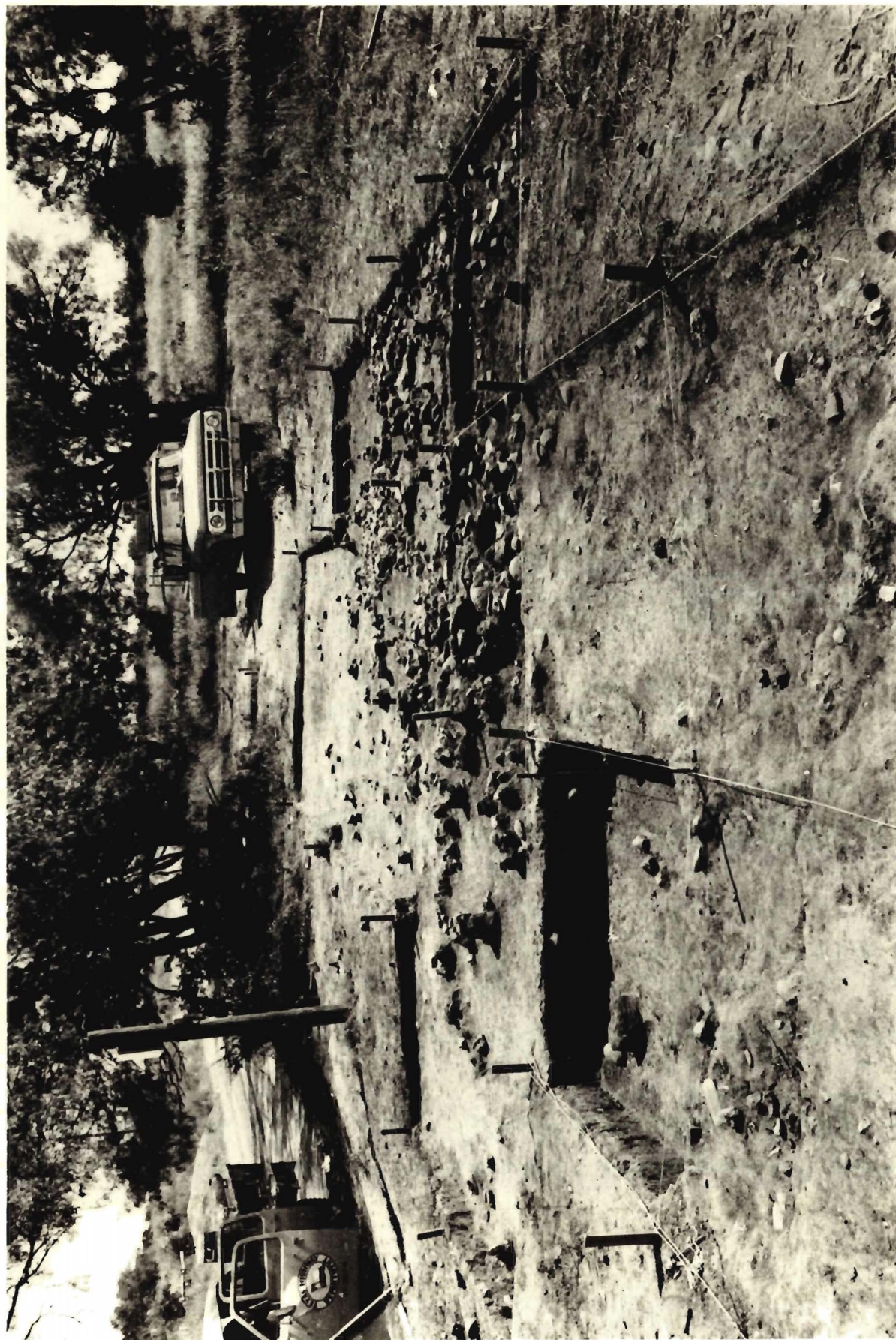


Figure 1. General view of the Late Prehistoric occupation at the Anthon Site (41 UV 60). The site continues to the opposite side of the road at left.



Figure 2. View of a Middle Archaic hearth at the Anthon Site.

Other artifacts from the site included 349 utilized flakes, 176 cores and core fragments, 67 unifaces and uniface fragments, 364 nonprojectile point bifaces and fragments and nearly 100,000 items classed as debitage (flakes, flake fragments, etc.).

Since *Perdiz* points were found, there existed the possibility that pottery might also occur at the site (see Hester and Parker 1970; Hester 1971). However, unlike the situation at the Berclair and La Jita sites, no pottery was recovered at the Anthon Site.

The proposed new dart point type, the *Anthon* (Figure 4), was found only in Round Rock Phase levels. This type is lanceolate to triangular in outline with slightly convex blade edges. The base is straight to slightly concave and slightly canted to the longitudinal axis. The base is also moderately to extremely thinned. The marked attribute of these specimens is the slight to extreme left beveling of the blade. The 21 specimens from the Anthon Site range from 5.6 to 8.4 cm in length and 2.2 to 3.2 cm in width. The cultural affiliation of this type is more closely linked with southwest Texas than to central Texas. [Ed. Note: There would also appear to be a cultural relationship with Archaic triangular dart points of southern Texas which begin very early and continue in diminished size even into the historic era: the early triangular-*Tortugas-Matamoras/Fresno*-mission triangular sequence.]

RESULTS OF LITHIC ANALYSIS

Debitage weights and counts per cubic foot of excavated soil increased through time. At this site there was proportionately more flake utilization in Late Prehistoric times than in Archaic times. The same type of flake tended to be selected for use and remained unchanged through time with the exception of a slight decrease in utilized flake lengths and widths in the later levels. Relatively few unifaces were found, but they appeared relatively more common in the Round Rock and San Marcos occupations. Proportionately more bifaces and biface fragments were found in the San Marcos occupation and slightly fewer were found in the Round Rock occupation. This may largely be due to changes in knapping activities at the site and some changes in frequency of reknapping bifaces is suggested. Nonprojectile point bifaces show a distinct reduction in size through time, and this is particularly noticed in the transition from the Twin Sisters to the Late Prehistoric levels.

Proportionately fewer projectile points were found in the Round Rock occupations than were found in the San Marcos occupations. Projectile point size also showed a marked decrease in size through time in the Archaic. Nonprojectile point biface dimensions, however, showed more dramatic decreases in width and thickness than did the projectile points. In a sense, the stage was being set for the acceptance of the smaller arrow points.

SUGGESTIONS FOR FURTHER WORK

This project has suggested several lines of further analysis and investigation. The analysis of snail shells and their fragments proved valuable, and further utilization of this source of information appears promising. Occasionally excavation levels as small as 0.25 in. or less were highly advantageous in isolating specific lithic work areas. Several such areas containing almost nothing but final biface thinning flakes were isolated by using the smaller excavation levels. Two marine shell fragments were recovered suggesting coastal contact and further work might shed light on potential trade routes within this area of Texas.* Though only a few Archaic sites have been extensively examined in this area of Texas, their potential contribution to our understanding of a people well adapted to their environment appears promising.

*[Ed. Note: For other evidence of such prehistoric trade routes in southern Texas, see Hester, et al. elsewhere in this issue.]

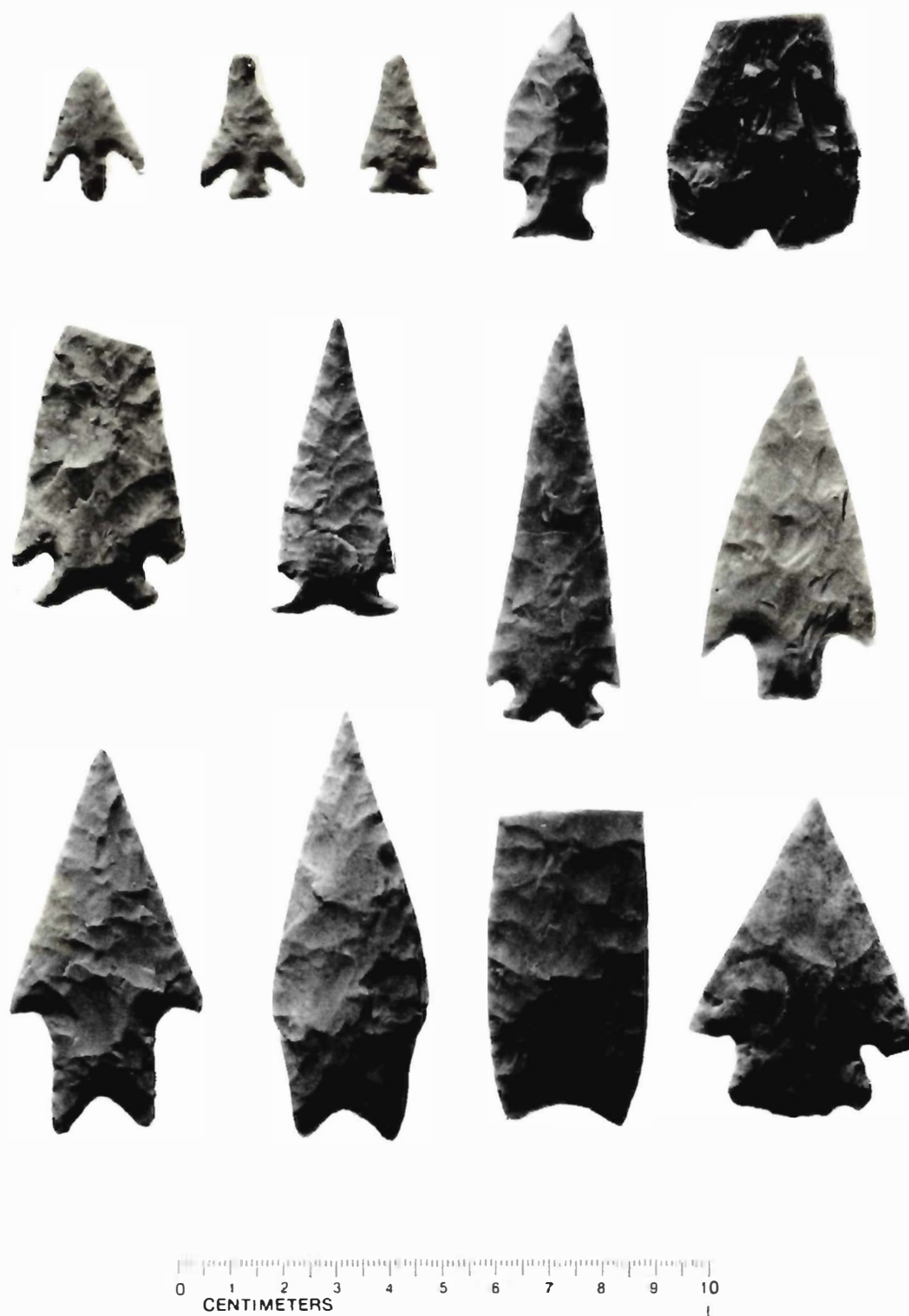


Figure 3. General range of projectile points from the Anthon Site.

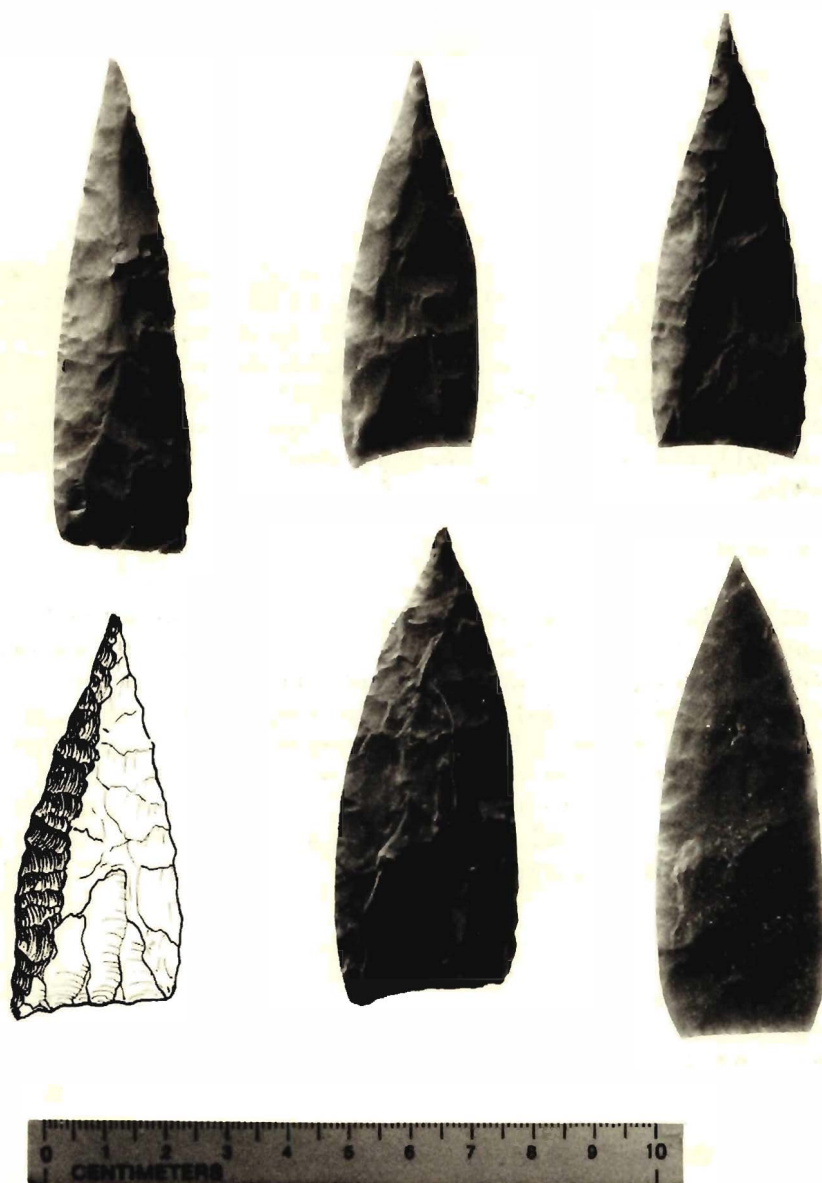


Figure 4. The *Anthon* type. Examples of the proposed new type from the Anthon Site.

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FURTHER NOTES ON THE BROMLEY COOPER COLLECTION
FROM MCMULLEN COUNTY, TEXAS

Roger H. Hemion

ABSTRACT

An initial report on a collection of artifacts loaned to the Southern Texas Archaeological Association by Mr. Bromley Cooper of Kingsville, Texas, was previously published by Lynn Highley (1979). This report is an expansion of that work to provide additional detail concerning point types collected southwest of Tilden (Frio River Basin) in the central western region of McMullen County. The portion of this collection previously reported was from Webb and Duval counties. Arrow point types in this portion of the collection include *Edwards*, *Scallorn*, *Perdiz*, *Toyah*, *Livermore* and, possibly, *Bonham*.

ARCHAEOLOGICAL BACKGROUND

Little investigation has been reported of sites in western McMullen County. Mitchell's (1978) summary of the Turtle Creek Phase in which he discussed arrow point types in the central southern Texas area did not include McMullen County, nor have other investigators provided much information in this area. Lynn, et al. (1977) reported on sites in Choke Canyon (Live Oak and eastern McMullen counties). Hester, Bass and Kelly (1974) have reported on a burial site near this area. The types of arrow points included in this collection are, as might be expected, representative of those found in adjacent areas which have been studied since those sites are neither very far removed nor ecologically dissimilar.

ARROWPOINT DESCRIPTIONS

A brief analysis of the dimensional range of the points in each type is presented. Only those points which are essentially whole were included in this analysis. Discussion of variants in typical characteristic patterns (referenced to Suhm and Jelks, 1962) is also presented where applicable.

Bonham - Three points have been classified as *Bonham* based on the stem characteristics (parallel to slightly flaring sides, narrow width) although all of them have somewhat longer than normal barbs for this type and are of broader (greater point angle) aspect (Figure 1, A-B). Such points are generally found in the A.D. 800-1200 period (Suhm and Jelks 1962).

Edwards - There are 27 points of this type, 20 of which are essentially intact (Figure 1, C-G). The remaining 7 are broken but the bases are sufficiently intact to provide identification as to type (diagnostic elements present). Their overall dimensional characteristics cover the following range:

Overall length	- 2.2 to 4.5 cm
Maximum width	- 1.5 to 2.2 cm
Maximum thickness	- 3.0 to 5.0 mm
Stem length	- 0.5 to 0.8 cm
Stem width	- 1.0 to 1.5 cm
Neck width	- 0.5 to 0.8 cm
Point angle	- 20° to 63°
Weight (whole points)	- 1.1 to 2.5 gm

These points show the characteristic wide variation for arrow points of this type delineated in Sollberger (1967). A factor not discussed there,

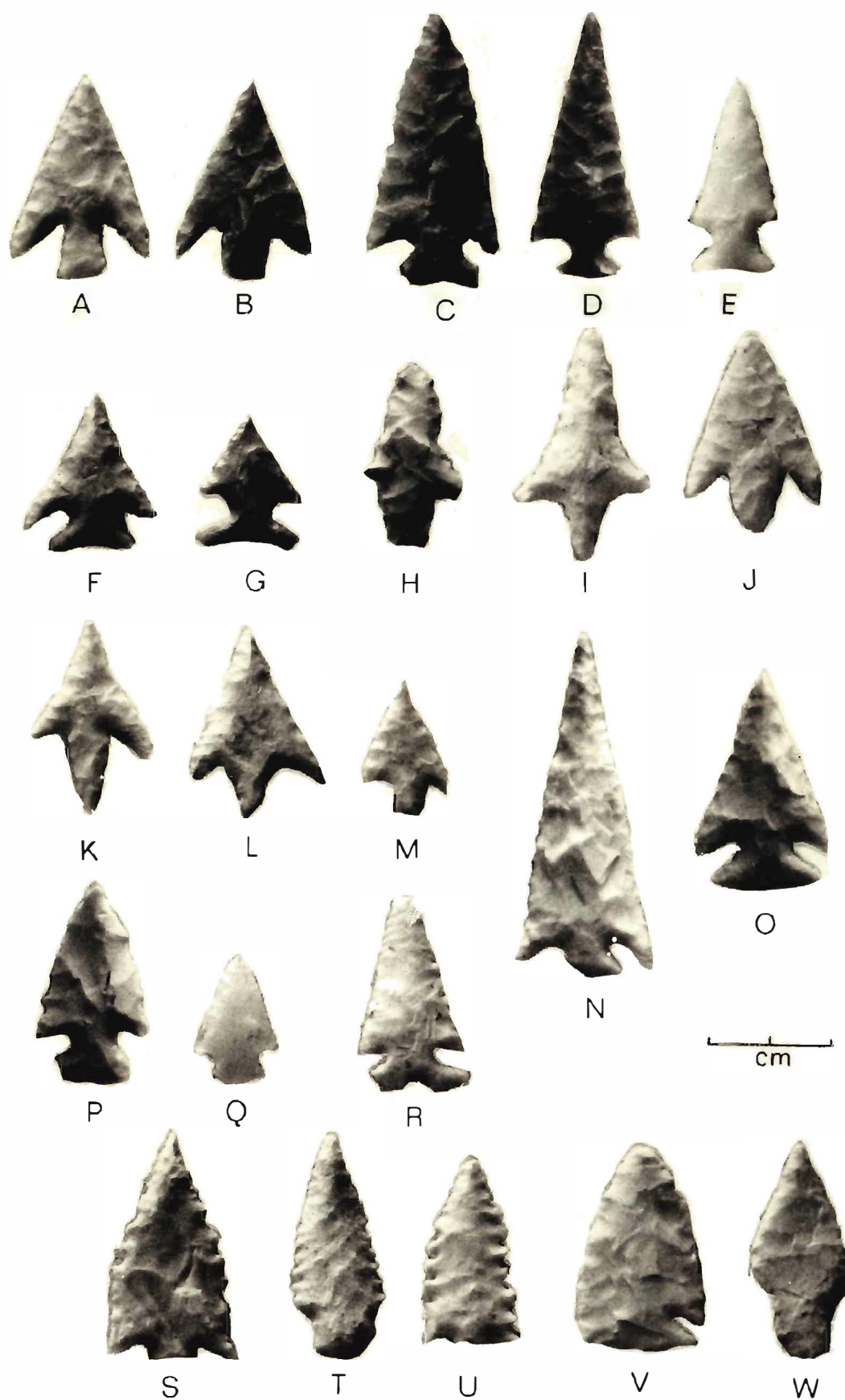


Figure 1. Arrow Point Types from McMullen County. A-B, *Bonham*; C-G, *Edwards*; H, *Livermore*; I-M, *Perdiz*; N-Q, *Scallorn*; R, *Toyah*; S-U, *Serrated*; V-W, *Unfinished Scallorn*, *Alba* (?).

however, is illustrated in Figure 2, C which shows that two templates possibly exist for this point type: one for the longer points utilizing a narrower point angle (20° to 35°), the other for the shorter points which have a broader point angle (35° to 63°). Some of this may have arisen from reworking (resharpening) of longer points (maintaining the distal end dimensions while shortening the point) thus broadening the point angle. Some of the smaller specimens do not appear, however, to have resulted from such a process, being apparently unaltered. Period of usage ranges from A.D. 900-1100. Regression equations for the two template forms are included with each graph (see Figure 2).

Livermore - One arrow point of this type is in the collection and is clearly identifiable by its cruciform shape, relatively crude workmanship, and stem configuration (see Figure 1, H). It is, characteristically, in the A.D. 800-1200 period.

Perdiz - There are 35 arrow points of this type in the collection. Of these, 19 were essentially complete insofar as length and general configuration are concerned. The remainder, not complete, are still sufficiently intact as to diagnostic elements to insure identification as to type. Overall characteristic dimensions range as follows:

Overall length	- 2.4 to 3.8 cm
Maximum width	- 1.3 to 2.2 cm
Maximum thickness	- 2.8 to 6.0 mm*
Stem length	- 0.6 to 1.5 cm
Stem width	- 0.6 to 1.0 cm
Point angle	- 20° to 65°
Weight (whole points)	- 0.9 to 2.1 gm

* Except for an unfinished point of 6.5 mm thickness

These points fall within the characteristic limits noted in Suhm and Jelks (1962:283) showing relatively wide variation in overall length and width, point angle, shoulder configuration (straight and barbed) and stem configuration. Since *Perdiz* tend to be, predominantly, worked flakes (single faced rather than bifacial) they tend to be thinner than other types of points. Straight, convex and concave edges are present (Figure 1, I-M). The principal diagnostic characteristic is the triangular, pointed stem usually $1/4$ to $1/3$ the total length and $1/3$ the width at the base of the head tapering to a relatively blunt point. *Perdiz* points are estimated to have been in use during the A.D. 1000-1500 period.

Scallorn - The collection contains 40 *Scallorn* arrow points of which 18 were adequately complete as to length to be considered whole and 9 more which, although broken at the tip, could be readily estimated in length. Dimensional characteristics fall within the limits delineated by Suhm and Jelks (1962:285) for this type:

Overall length	- 2.1 to 5.3 cm
Maximum width	- 1.3 to 1.9 cm
Maximum thickness	- 3.5 to 6.0 mm
Stem length	- 0.5 to 0.8 cm
Stem width	- 1.0 to 1.8 cm
Neck width	- 0.5 to 0.9 cm
Point angle	- 20° to 50°
Weight (whole points)	- 1.0 to 3.2 gm

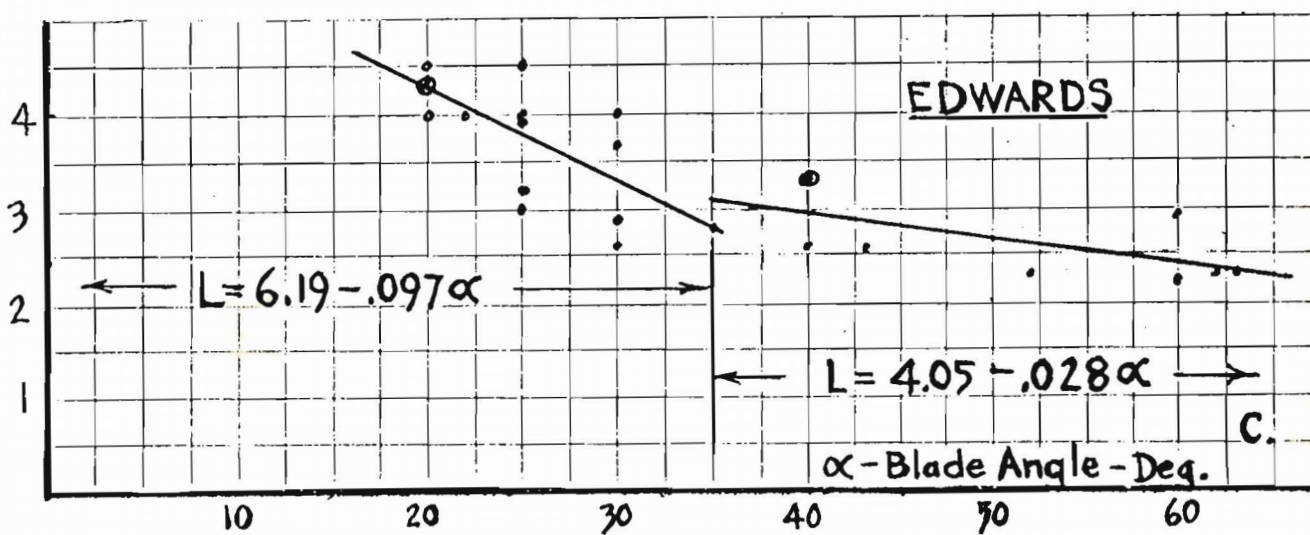
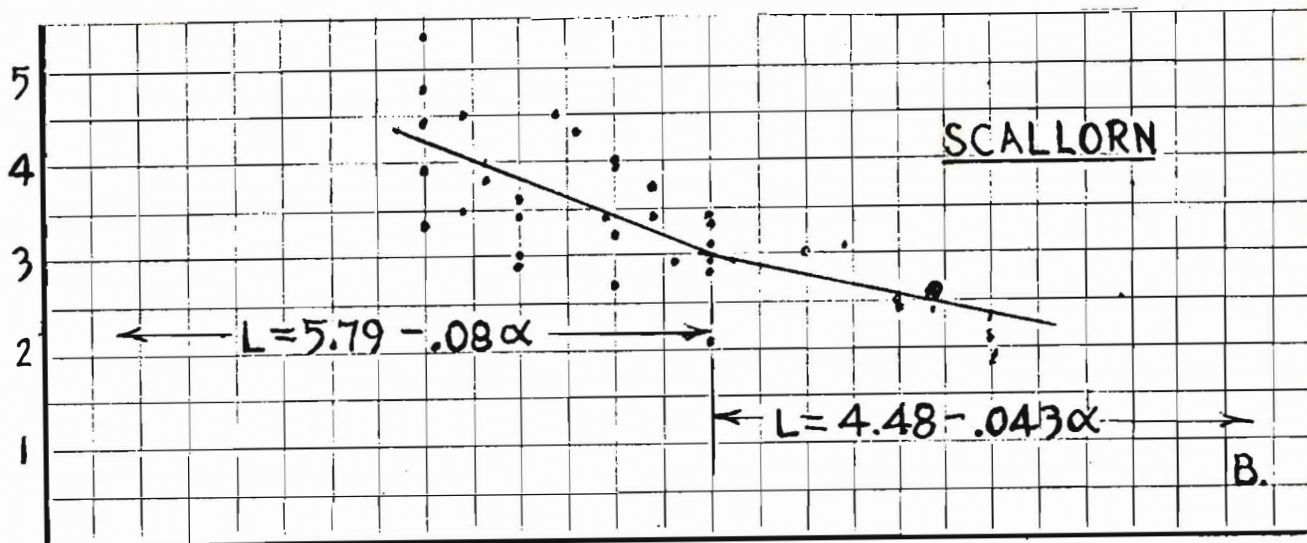
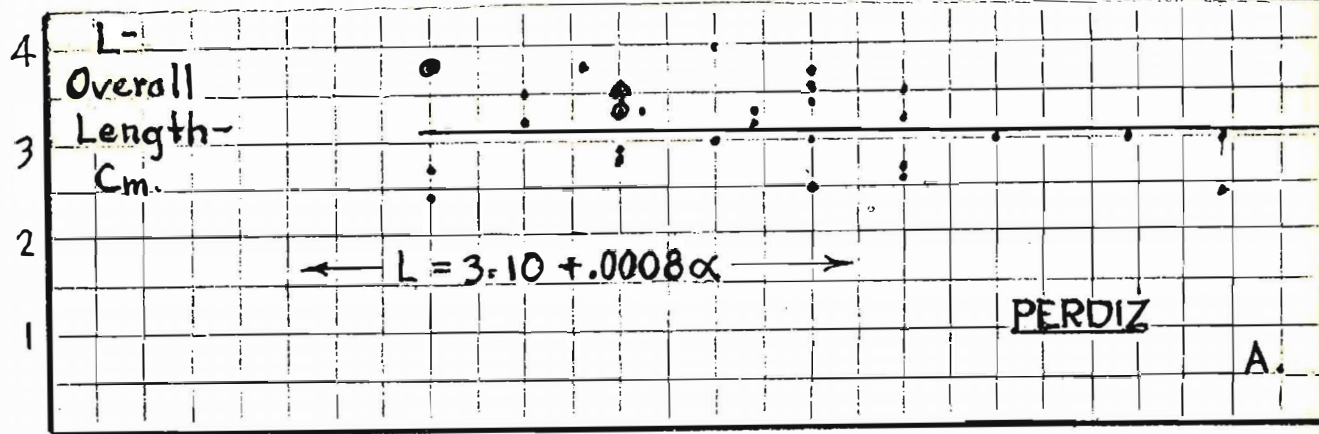


Figure 2. Length/Blade Angle Relationship.

Similar to the discussion of *Edwards* arrow points in this collection these *Scallorn* type points appear to be fashioned in two basic template designs; i.e., the longer points have a narrower point angle than the short points. Figure 2, B shows this differentiation, indicating a greater change in point angle with the shorter points (2.0 to 3.0 cm) as contrasted with the more acute angles of the longer (3.0 to 5.0 cm). Period of use for *Scallorn* points is considered to have been A.D. 500-1200.

Toyah - One point considered to be a *Toyah* type was included (Figure 1, H). This is primarily characterized by the rather deeply notched stem base and acute point angle. Period of use is probably late prehistoric to early historic.

Miscellaneous

Figure 1, V-W: A possible unfinished *Scallorn* and another arrow point which may have been the beginning of an *Alba* point were also included in the Cooper collection. Brom Cooper has reported (personal comment) other of the *Scallorn*-like points, in what has here been designated as unfinished condition, from locations in McMullen and Duval counties, including a number found together at a single site. He suggests this may be a completed form. Mokry (1979) discussed side-notched arrow points from Starr County (41 SR 251) but did not indicate whether he considered the single-notched type to be a finished form. Sorrow, et al. (1967) discuss single-notched dart points which, judging from the photographs, appear to be incomplete *Pedernales*. The stems are unfinished, in addition to their having only a single notch. These authors take no specific note, however, that these points are either single-shouldered or unfinished.

Figure 1, S-U: The collection contained four nicely serrated points, one of which (Figure 1, T) may be an *Alba* (stem broader than *Bonham* but with parallel sides). The others have the stems broken off and are thus indeterminate as to exact type.

Distal Fragments - There are 27 distal fragments in the collection which are not positively identifiable as to type. All of these have point angles of 45° or less with 11 being under 30°.

DISCUSSION

The Brom Cooper collection extends our knowledge of Late Prehistoric artifacts in central western McMullen County. These arrow points range in age from as early as A.D. 500 to perhaps even the Historic period. [Ed. Note - One metal arrow point was also found in this area by Brom Cooper; it will be reported at a later date.] The presence of *Edwards* arrow points extends the distribution of this early Late Prehistoric type into McMullen County and the lower Frio River basin.

One interesting problem raised by this collection involves single-notched *Scallorn*-like points; Brom Cooper reports there are others found in the area, and he considers these as complete forms. However, a review of the literature failed to reveal any support for this contention. Other instances of single notched forms need to be reported and studied before this issue can be fully resolved; on the basis of present evidence, we must probably consider these as unfinished points.

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[EDITOR'S NOTE: The regressions plotted in Figure 2 graphically display the relationship between overall point length, expressed in centimeters, and blade angle, expressed in degrees. The regression line in each graph summarizes the overall relationship between the two variables: for *Perdiz*, there is very little correlation between length of point and the angle of the blade tip; for both *Scallorn* and *Edwards*, there is a moderate negative correlation - the greater the length of the specimen, the smaller the blade angle. The author categorized the *Scallorn* and *Edwards* samples into two categories: those with greater than 35° blade angles and those with less than 35° angles, and has calculated separate regressions for the two categories. An alternative procedure would be to show the relationships as curves; however, this is much more complex to calculate mathematically and is certainly more difficult to explain. Regardless of whether these relationships are depicted as straight lines (linear) or curves (non-linear relationships), the fact is that these data clearly demonstrate that there are distinctly different patterns for *Perdiz*, *Scallorn*, and *Edwards* point types. For both *Scallorn* and *Edwards*, when the length is less than 3 cm, the blade angle will probably be much larger. This does not hold for *Perdiz*; shorter (less than 3 cm) *Perdiz* points have blade angles ranging from 20° to almost 60°. The resharpening suggestion would not fully explain these results since undoubtedly some *Perdiz* were also resharpened (as perhaps in Figure 1, I and K). One obvious possibility is that there may have been some shift in weapons technology over time since *Scallorn* (A.D. 500-1200) and *Edwards* (A.D. 900-1100) are generally earlier than *Perdiz* (A.D. 1000-1500). Perhaps we are seeing part of the shrinking size of points postulated by Sollberger (1967) for the Late Archaic and initial Late Prehistoric. In any case, these differential relationships deserve further study, as do other possible relationships (such as between blade length and point thickness, or thickness across time, etc.). The Length/Blade Angle relationships demonstrated in this paper also need to be confirmed with other samples and studied with other arrow point types.]

FURTHER NOTES ON OBSIDIAN ARTIFACTS FROM DIMMIT COUNTY, SOUTHERN TEXAS

Thomas R. Hester, Jimmy L. Mitchell,
Frank Asaro, and Fred Stross

ABSTRACT

Four obsidian artifacts were recovered from archaeological sites in Dimmit County, southern Texas. Three of these artifacts have been traced, through x-ray fluorescence analysis of trace element content, to obsidian flows in central Mexico and probably represent trade relations through the Brownsville Complex at the mouth of the Rio Grande River. The fourth artifact has now been traced to an obsidian source in northcentral New Mexico and is postulated to represent a direct or indirect trade relationship with the Jornada Mogollon.

INTRODUCTION

In 1975, Hester, House, Jack, and Stross reported the recovery of four artifacts of obsidian from archaeological sites in Dimmit County, southern Texas. These artifacts were analyzed by R. N. Jack, then of the University of California, Berkeley, using rapid-scan x-ray fluorescence techniques to identify the amounts of trace elements.

This technique has been used previously to identify the source of obsidian artifacts in south Texas (Hester and Mitchell 1974) and in other areas of the United States as well as Mesoamerica (Stross, Hester, Heizer, and Jack 1978). Since the pattern of relative quantities of trace elements is unique to each geologic source, reasonable inferences can be made about prehistoric trade relationships by matching obsidian artifacts found in an archaeological context to their original sources.

Previously, two obsidian arrow points found in McMullen County, Texas, were matched to sources in western New Mexico; the arrow point styles suggested a Late Prehistoric or early Historic time frame and the inference was made that the two artifacts were probably Apache or some other historic group (Hester and Mitchell 1974).

Three of the four artifacts recovered from Dimmit County were tentatively matched to the Guadalupe Victoria (Puebla) and Santa Teresa (Guerrero) obsidian sources in central Mexico. The inference made was that they may have been brought to southwest Texas via a trade network stretching through the Huastecan area of Mexico and the Brownsville Complex at the mouth of the Rio Grande River (Hester, House, Jack, and Stross 1975). However, a conclusive link between these three specimens and their suspected geologic sources has still not been satisfactorily made.

ARTIFACT

The fourth artifact recovered in Dimmit County was not matched to any source at the time of the original study. This specimen is a flake fragment which is approximately 4 mm thick (see Figure 1). It is made of a reddish-black obsidian which is quite different from the other obsidian specimens recovered. It was collected from the Armstrong site in northeastern Dimmit County by J. W. House of Carrizo Springs, Texas, and is part of his extensive collection of South Texas artifacts. From the context of the discovery, it seems certain that this specimen is from prehistoric deposits (i.e., it had not been introduced in the post contact period).

Data for this specimen, in terms of the relative abundance of various trace elements, are shown in Table 1. Also displayed in this table are mean (average) abundances for a group of obsidian artifacts recovered from several sites in southern New Mexico and the Texas Panhandle.

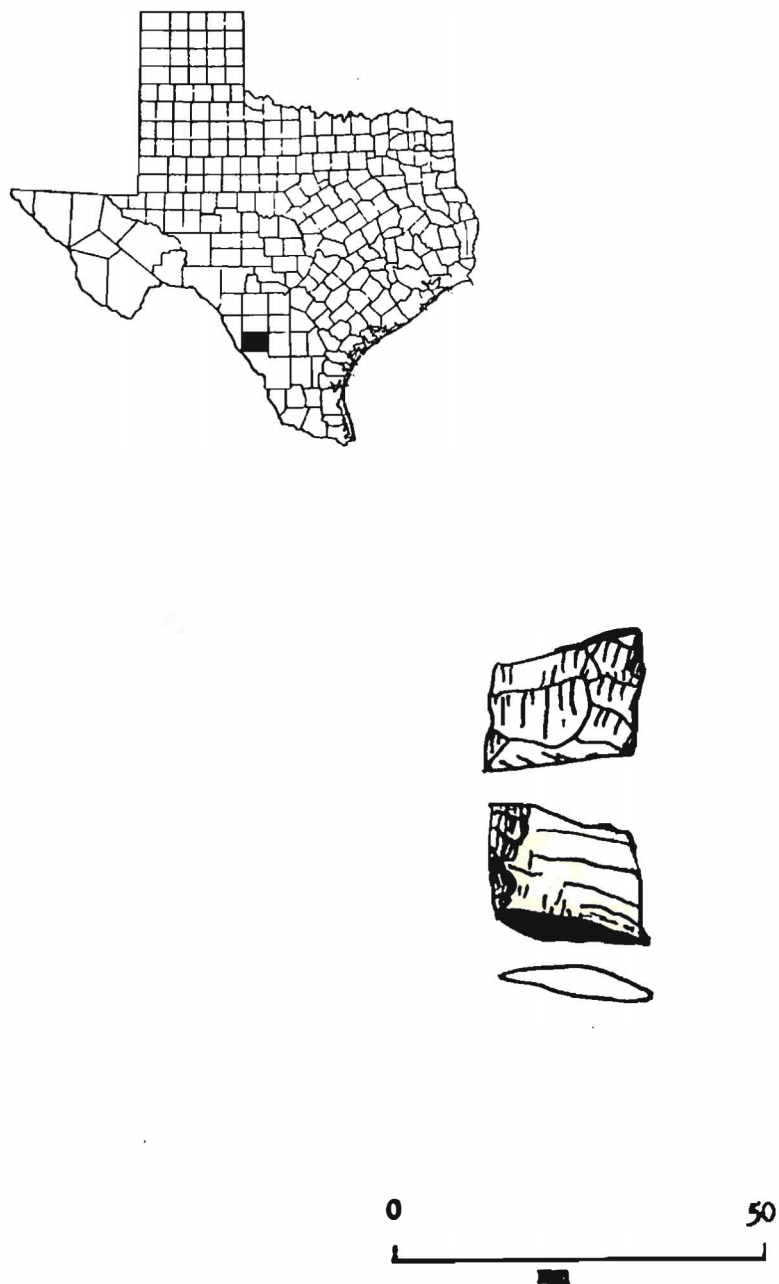


Figure 1. Obsidian Artifact from the Armstrong Site, Northeastern Dimmit County, Southern Texas. (Drawing adapted from Hester, House, Jack and Stross 1975).

Sample	Rb	Sr	Zr	Y	Nb	Fe(%)	Zn	Mn
Tex 21 (Dimmit County)	203	4+	191	69	82	.81	92	405
Mean of High Nb Group (N.Mex. & Tex Panhandle)	222	11+	186	80.3	81.3	.71	90	558

Rb=Rubidium; Sr=Strontium; Zr=Zirconium; Y=Yttrium; Nb=Niobium; Fe=Iron; Zn=Zinc;
Mn=Manganese

Table 1. Element Abundances for High Nb Obsidian Artifacts.

The element abundances for the Dimmit County obsidian artifact are distinct from most south Texas specimens in terms of the relatively high Niobium content. R. N. Jack identified a group of obsidian artifacts from Texas and New Mexico with this characteristic which he titled the "High Nb group" although in his work (1971-1974), no source for this obsidian could be identified.

Recently, while working on additional specimens from Texas and New Mexico, Asaro and Stross have been able to match the High Nb obsidian to comparative samples from the Valles caldera (Letter, Asaro and Stross to Hester 1979). The caldera, one of the world's largest, is located in the Valles mountains west of Santa Fe, New Mexico (Williams 1941). The Valles caldera measures 20 by 25 km and resulted from the explosive venting of molten materials and the subsequent collapse of the area (Williams and McBirney 1978:211-212). It is now a sunken area (caldera) which is surrounded by a ring of mountains; this basin contains a sizeable number of obsidian deposits which apparently were used by prehistoric man as a source of materials for artifact manufacture.

Other High Nb obsidian artifacts have been recovered in the Radium Springs area of southcentral New Mexico (Black and Hester 1977), Andrews County in west Texas (Collins 1968), and Roberts and Hutchinson Counties in the Texas Panhandle (Mitchell, Hester, Asaro, and Stross; in press). Additional obsidian specimens, including some High Nb artifacts, have been found in Travis, Williamson, and Bexar Counties in central and southern Texas but have not yet been published.

INFERENCES

The presence of High Nb obsidian in Dimmit County suggests some trade relationship between this south Texas locality and New Mexico. In the Radium Springs area of southcentral New Mexico, a strong trade relationship with the northern Jornada Mogollon area of the upper Pecos River was postulated based on the high relative incidence of Jornada pottery types (Roemer and Katz 1977).

Mogollon ceramics have also been reported from Dimmit County and other south Texas sites (Hester and Hill 1969, Orchard and Campbell 1960). On the basis of such Mogollon pottery in southern Texas, it would be reasonable to infer that a trade relationship of some sort did exist between this area and the Jornada Mogollon.

Thus, there are two converging lines of evidence (obsidian source analysis and pottery analysis) which suggest trade between southern Texas and New Mexico. The relative scarcity of both High Nb obsidian and Mogollon ceramics in south Texas may indicate indirect mechanisms (through intermediary groups) rather than a direct trade relationship (Mitchell, Hester, Asaro, and Stross; in press).

ACKNOWLEDGEMENTS

Our thanks to J. W. House of Carrizo Springs for permitting us to study this distinctive obsidian artifact; to R. N. Jack for his earlier obsidian analysis and the identification of the High Nb group; and to the Lawrence Berkeley Laboratory of the University of California, Berkeley for processing this specimen.

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ADDITIONAL LATE PALEO-INDIAN ARTIFACTS FROM SOUTHWESTERN
ATASCOSA COUNTY, TEXAS

Richard, Ben, and Mike McReynolds

ABSTRACT

Hester (1968) reported a number of Paleo-Indian artifacts from sites along San Miguel Creek in Frio, Atascosa, and McMullen Counties. Additional Paleo-Indian materials were reported from the vicinity of Live Oak and San Miguel Creeks in southwestern Atascosa (McReynolds, et al. 1979). A continued surveillance of this area has produced additional artifacts which are diagnostic of the Late Paleo-Indian period.

INTRODUCTION

The San Miguel Creek area of Atascosa County is already well known for producing various Paleo-Indian artifact types (Hester 1968; Mitchell 1974; McReynolds, et al. 1979; Hester 1980), as well as Archaic and Late Prehistoric materials. Localities along the creek and some of its side tributaries, particularly Live Oak Creek, have been very productive in terms of the number of *Plainview*, *Angostura*, and *Golondrina* points. *Golondrina* specimens are of particular interest since they are no longer considered as a subvariety of *Plainview*, but are now recognized as a separate variety (Johnson 1964; Perino 1971; Hester 1977; Johnson and Holiday 1980; Hester 1980). Such recognition has stimulated further interest in the study of the function and distribution of *Golondrina* specimens, which appear to be diagnostic of the Late Paleo-Indian period (circa 7000 B.C.) where *Plainview* points date around 10,000 years ago (Johnson and Holiday 1980:104).

Since our initial report on Paleo-Indian materials from along the San Miguel, we have maintained a watch over the area for additional Paleo-Indian artifacts. Six partial dart points and one complete specimen have been collected since our previous report was made. In addition to dart points, one *Clear Fork* tool is included in this report because of its apparent association with the complete dart point.

Golondrina - 4 partial and 1 complete specimens (Figure 1, A through Figure 2, E).

All specimens appear to have been lanceolate in shape and exhibit both lateral and basal smoothing. Lateral edges flare slightly on specimens 1,A and 1,B, and more markedly on specimens 2,C and 2,D. Basal corners are missing on specimen 2,E but the lateral edges suggest that it was also flared at the base. Reworking was accomplished on two specimens (Figures 1,A and 2,E). The specimen shown in Figure 1,A has a right hand bevel on both faces. The point shown as Figure 2,E was probably broken and then reworked with the attempted removal of a burin spall from the distal end.

Specimens 1,A and 2,D are made from materials foreign to the local area. The complete specimen (Figure 1,A) is a yellow translucent chalcedony which looks very much like beeswax while the specimen shown as Figure 2,D is a dark grey opaque chert. A local, light tan cobblestone flint was used in the manufacture of specimens 1,B, 2,C, and 2,D.

Specimen 2,F is undetermined as to a definite type, but the general shape, flaking, and lateral edge smoothing on the lower portion of the remaining blade edge suggest that it also was a *Golondrina*. The material is of a good quality brown Edwards flint.

Basal thinning was well accomplished on all *Golondrina* points which have their bases intact. The depth of basal concavities (where measurable) is as follows:

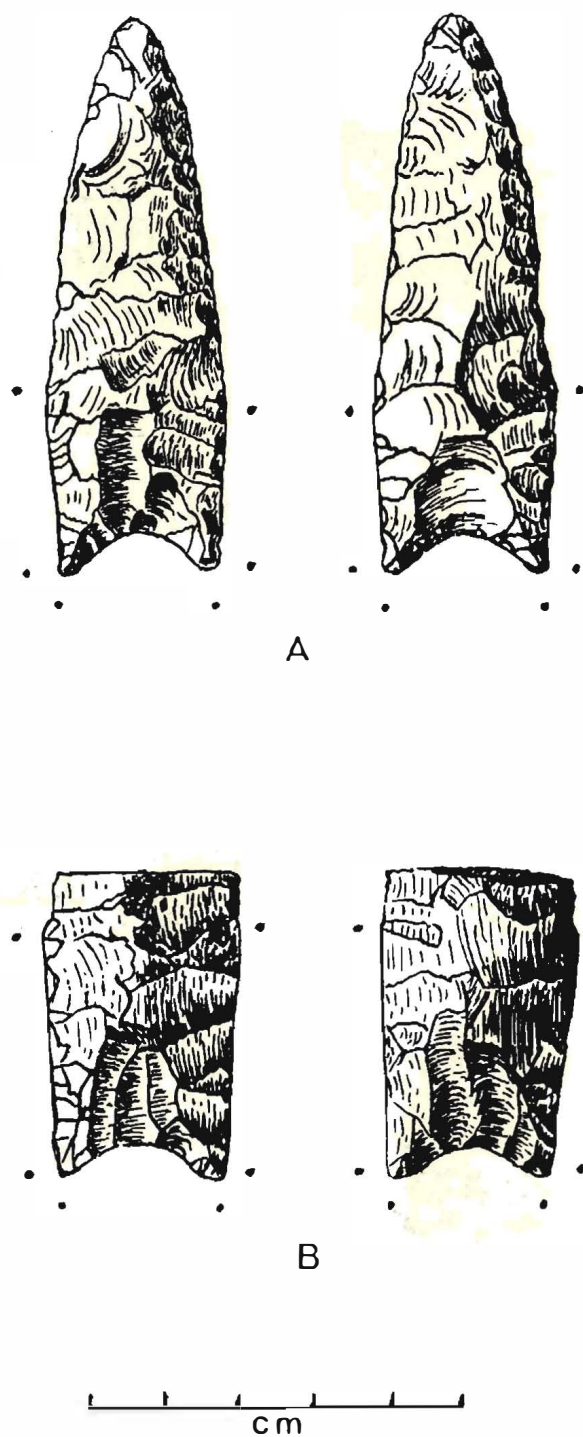


Figure 1. *Golondrina* points from southwestern Atascosa County. Note reworking on specimen A. (Dots indicate smoothing.)

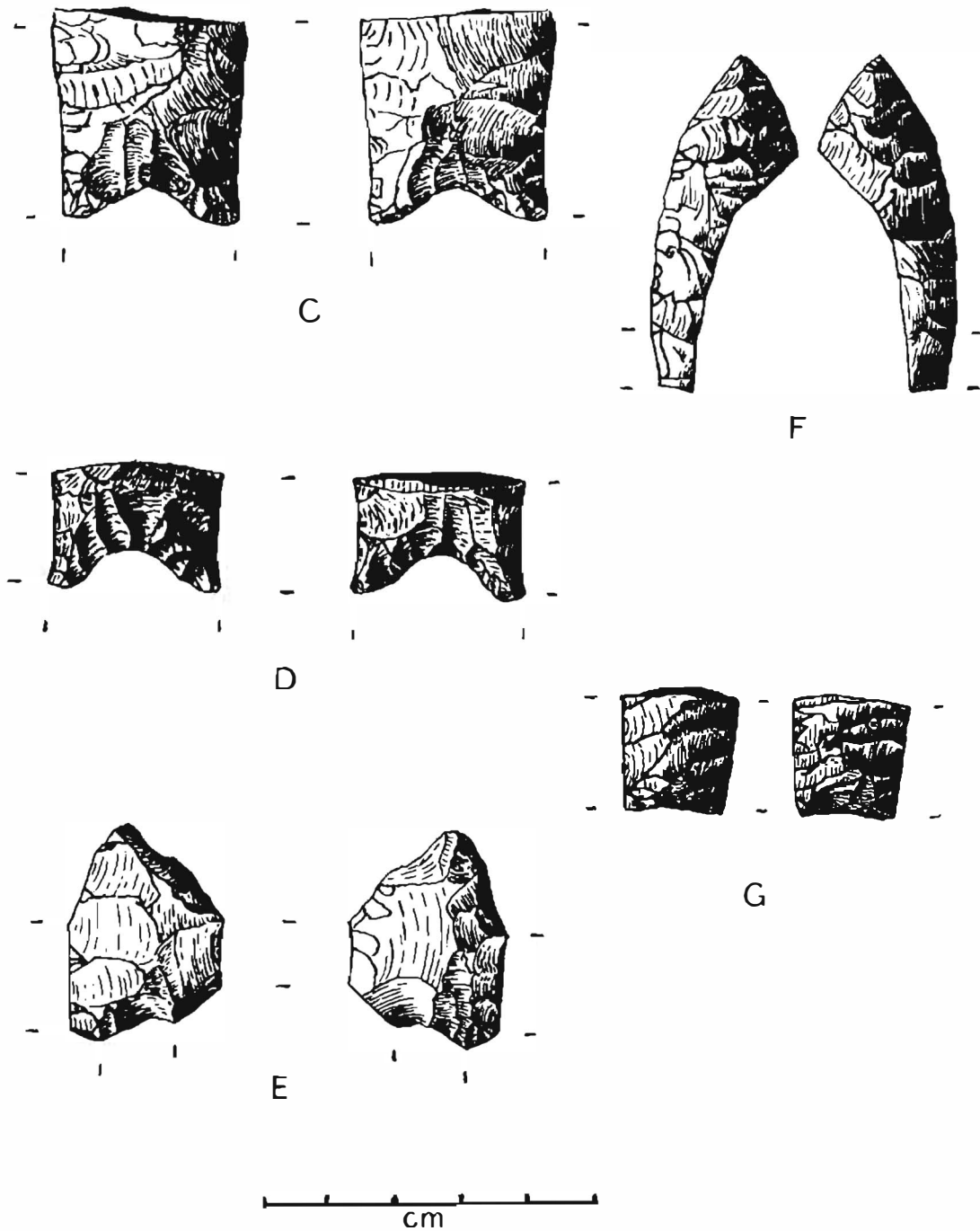


Figure 2. Fragmentary Late Paleo-Indian Artifacts from Atascosa County.
C-F, *Golondrina*; G, *Angostura*. (Dashes indicate extent of grinding.)

<u>Specimen</u>	<u>Depth (mm)</u>
1,A	5
1,B	4
2,C	5
2,D	6

Angostura - One partial specimen (Figure 2,G)

Although the one *Angostura* specimen is only a minimal portion of a complete dart point, there is little doubt as to its type. It is apparently of lanceolate form and has a straight base. Lateral edges have been heavily ground, and this grinding originally extended beyond the terminal break point. Oblique flake scars are evident on both faces. The material is of a local tan flint.

This specimen was found approximately one hundred yards from the *Golondrina* group.

Clear Fork Tool - One specimen (Figure 3)

This specimen is essentially a triangular shaped tool, with a slightly concave bit edge. The ventral face is unmodified and its profile is more plano-convex than biconvex. The maximum width occurs at the midsection. The material from which the tool is made is a redish quartzite.

The *Clear Fork* tool was found at the same time as the complete *Golondrina* (Figure 1,A), approximately eighteen inches away. It was apparent that both specimens were eroding out of the same strata.

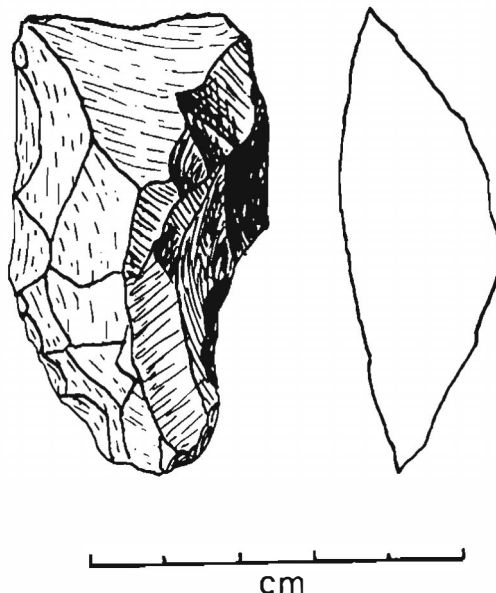


Figure 3. *Clear Fork* tool associated with *Golondrina* complex in southwestern Atascosa County.

DISCUSSION

The bulk of the materials reported here and previously have been either basal fragments or reworked specimens. In addition, numerous chips and flakes were also observed to be weathering from the same levels.

Hunting activities would necessitate regrouping and the replenishment or repair of damaged or worn equipment. The presence of chipping debris from the same strata would seem to substantiate that this was a hunting camp area where hunting tools were reworked or replaced. The presence of a *Clear Fork* tool, which is generally considered to be a wood working tool (Hester, et al. 1973), in the same locality and strata, suggests that repair or replacement of wooden foreshafts, spears, or atlatl handles was also occurring.

There is no evidence to indicate whether this hunting camp was a one-time occupation or whether this site was repeatedly used by Late Paleo-Indian hunters. Variables effecting the lithic evidence at this site would include: size of hunting group; duration of stay, or the number of times this particular spot was visited. Regardless of the camp's duration, it is clear that on this spot ancient man did stop and spend some time to make repairs - and perhaps to ponder the future...

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PLAINVIEW POINTS FROM 41 MC 10, MCMULLEN COUNTY, TEXAS

Curtis Dusek

The site of 41 MC 10 in McMullen County has produced two basal fragments of *Plainview* points, which, along with other early points recovered in the surrounding area, seem to indicate the area was a favored spot of early Paleo-Indian peoples in the region.

The site of MC 10 itself lies within the proposed Choke Canyon Reservoir area, approximately one-half mile northwest of Calliham (Figure 1). It rests upon the northernmost extension of a low ridge, between the elevations of 200 to 220 feet above sea level. The Frio River lies to the west and north of the site, while Salt Creek runs to the east of it, emptying into the Frio River approximately 0.6 mile northeast of the site. The site offers a commanding view of the Frio River floodplains to the northwest and the Salt Creek valley to the east.

The land upon which the site lies has been cleared and planted in coastal bermuda grass; the grass greatly hinders surface visibility. Most cultural material is evident in roadcuts and small erosional washes. Cores, flakes, and fire cracked chert are present. One small area of burned sandstone seems to indicate a possible hearth remnant.

A chert outcropping is present directly to the north of the site, at the base of the ridge upon which the site lies. Sandstone is also plentiful in the chert outcropping. Numerous other chert outcroppings are also present around MC 9, which lies immediately north of MC 10, and also along Salt Creek.

The only two points known to have been collected from MC 10 are two fragments of *Plainview* points which were recovered by my father, Henry Dusek, along the roadcut in the eastern portion of the site (see Figure 2,D). Both fragments are bases and exhibit smoothing along the lateral edges. The smaller specimen also has retouch along a lip remaining when the point fractured in two. The larger specimen is of a dark brown chert, and has a minor amount of patination. The smaller specimen is of a light brown chert and exhibits no evidence of patination. Chert from which to manufacture the points would have been easily obtained from any of the outcroppings in the area.

Three other early points are known to have been recovered from the area of MC 10. The late John Mikus of Calliham is reported to have collected a *Folsom* point of alibates flint from the immediate area of the site (Mrs. John Mikus, personal communication). A basal fragment with smoothing along the lateral edges and resembling an *Angostura* point was recovered by the Texas Historical Commission from MC 7 during their original survey of the area (Lynn, et al. 1977). MC 7 lies upon the same ridge as MC 10, and directly south of it. A perforator, which, judging from the fine oblique flaking is most probably a reworked early point, has been collected from MC 9. Evidence of Archaic and Late Prehistoric habitation is also present at MC 9.

The Frio, Nueces, and Atascosa River and San Miguel Creek drainages in McMullen and nearby counties were apparently preferred by South Texas Paleo-Indians (Hester 1980, Figures 6.1 and 6.7). A number of sites in this region have produced most types of Paleo-Indian projectile points.

The exact reason for Paleo-Indian inhabitants to be drawn to the Frio River valley and the area of MC 10 cannot be definitely stated, although several speculations can be made.

First, the ridge upon which MC 10 lies offers a strategic overview of the Frio River valley to the northwest and the Salt Creek valley to the east. Such overviews (or "overlooks") are known to have been prized localities for habitation by Late Paleo-Indian peoples (for example, St. Mary's Hall in the Salado Creek valley; see Hester 1980:138). It is often assumed that movement of large game animals could be easily watched from such overviews.

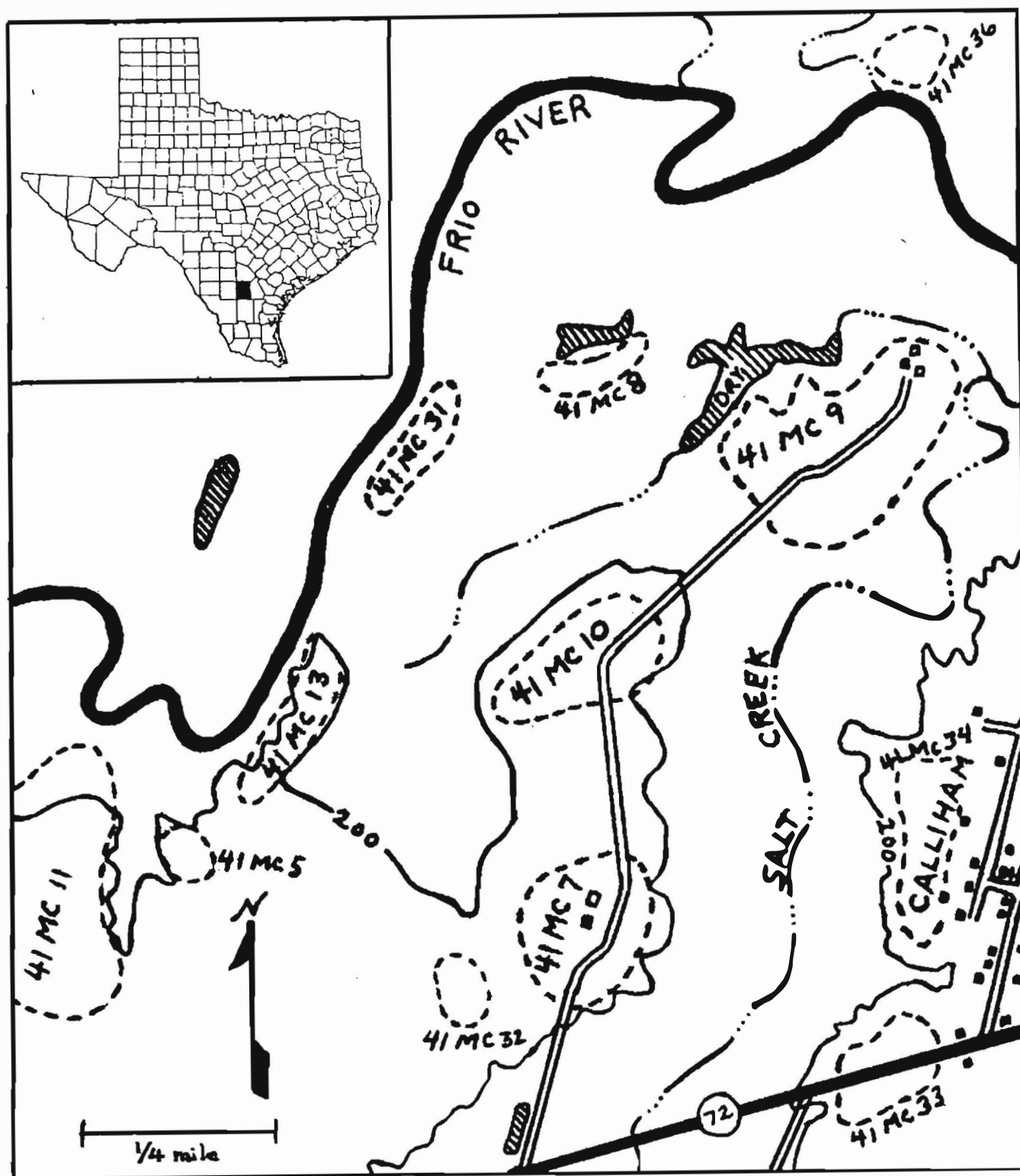


Figure 1. 41 MC 10 and surrounding area. (Inset displays location of McMullen County in Southern Texas.)

Secondly, the close proximity to water was most obviously a contributing factor to the habitation of MC 10. The Frio River offers a year-around reliable source of water, while Salt Creek is known today to drain water for days following a heavy rainfall, with water standing in sinkholes along the creek for long periods of time.

Finally, the easy availability of natural chert in the area was also an important factor. As previously stated, chert outcrops at the northern base of the ridge upon which MC 10 lies. Chert outcroppings are also present around MC 9 and at numerous points along Salt Creek, east and northeast of MC 10. Large fist-sized cobbles are common in the outcroppings. A present day gravel quarry is located in the northeastern portion of MC 9.

These three reasons were most probably important contributing factors to the habitation of MC 10 and surrounding area by early Paleo-Indian peoples.

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Figure 2. Plainview basal fragments recovered from 41 MC 10.

ARCHAEOLOGICAL MYTHS: FURTHER COMMENT ON FLAKES AND BLADES

J. B. Sollberger

I feel that further comment is necessary on the discussion of the Gibson Lithic Cache in the most recent issue of *La Tierra* (Volume 7, No. 2, April, 1980).

There are a number of myths in archaeology. Arens (1979) has examined dozens of reports of cannibalism which have been repeated over and over again in the archaeological literature. He finds these reports to be myths. No cultural group admits cannibalism - all consider themselves too civilized, but each is willing to say - not us, but those beyond us in space or behind us in time were the cannibals.

So what? The point is that archaeologists are often prone to accept as a demonstrated fact ideas which have been repeated by a well known name (or numerous not so well known). But myths need to be dealt with on the basis of present evidence. As new knowledge comes along, we should be open minded to correcting past misunderstandings.

In response to my comments (Sollberger 1980) on the Gibson Lithic Cache, Tunnell (1980:34) in rebuttal states, "Many of his (Sollberger's) experiments have been conducted using devices and metal tools not known to have been present in the prehistoric period." This is the second repetition where I have been so accused. Is this a myth in the making? No one mentions that I am the only public demonstrator to replicate *Folsom* fluting successfully - using no metals whatsoever! Others have tried but the results are failures; they are too thick, etc., and are not really *Folsom* replications.

Now, Tunnell (1978:49) has written that "we propose that blades were probably produced by indirect percussion or pressure." I tested his pressure hypothesis. This is where I found it necessary to use leverage and metal - on the order of 7,000 lbs. of force. Small chert blades - yes; large blades - no. Neither antler nor bone tools will withstand the required force. My conclusion: Tunnell has repeated the pressure myth from many others. So, now I have been declared illegitimate for testing a published hypothesis and finding a possible error!

Tunnell (1980:34) also regrets that I "failed to respond to equally important hypotheses concerning preforming..." etc. Admittedly, I was brief in my comments. May I add slightly here? All blade cultures, excluding the so-called microblade technologies, appear to have initially prepared blade cores for blade production by first establishing a guiding ridge (variously termed cresting or *lame a cret*). Such preparation appears necessary in working flints by a true blade culture. I have never seen an illustration or mention of this type of preparation from the "southern plains region."

Aside from flake blades, most true blades fall in length between 4.2 and 5.2 cm at a minimum, and between 5.2 and 7.5 cm maximum. Their width is largely confined between 1.2 and 1.9 cm. While some larger blades were made (and I have made some), generally the width to length ratio remained a fairly constant relationship.

Tunnell (1978:16) gives the width of the Gibson Cache specimens as being 3.18 to 5.20 cm. Please note that these measurements are for "blades" which have already suffered drastic width losses after being removed from the core. Further, trimming flakes from blade lineal edges cannot be removed (see Sollberger 1976:261-267) as extensively as shown by Tunnell (1978: Figure 26).

From the data presented above, I must reaffirm my conclusion that the Gibson Cache represents core trimming and shaping flakes including flake-blades produced after the core was prepared. True blades simply do not have these dimensions.

As regards the hypothesis that blades can be produced by indirect percussion or pressure, my replication experiments indicate that it can't be done using prehistoric bone or antler tools. If anybody can do it, then let's see the evidence.

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PUBLICATION NOTICE

Houston Archeological Society Report No. 3 entitled "The Owen Site, 41 HR 315: A Long Occupation Sequence in Harris County, Texas" by L. W. Patterson, is now available. This represents the longest occupation sequence excavated to date on the upper Texas coast, spanning a time period of Late Paleo to Late Prehistoric.

Plainview is the earliest projectile point type. Data is presented on the introduction and further technological development of the bow and arrow. The price of this report is \$5.00 postpaid, and is available from John Herbert, 5935 Dellfern, Houston, Texas 77035.

AUTHORS

FRANK ASARO is with the Lawrence Berkeley Laboratory of the University of California at Berkeley. Dr. Asaro has collaborated with Tom Hester on a number of articles on obsidian trace element analysis including a note on South Texas obsidian for the *Texas Journal of Science*.

PAUL COOK has been the Treasurer of STAA for several years. He is an Air Force behavioral scientist who holds an M.A. degree from St. Mary's University, and he has also taught psychology courses at San Antonio College. A native of Ohio, Paul has been in South Texas since 1976.

GLEN H. DORAN worked at the Anthon Site for the State Department of Highways and Public Transportation archaeological studies program. Glen now works in California and has been working on a more extensive report of the Anthon excavations.

CURTIS DUSEK is a native son of McMullen County who, until recently, lived in the area which will be covered by the waters of the Choke Canyon Dam. Curtis now resides in San Antonio and is an archaeology student at the University of Texas at San Antonio.

ROGER HEMION is a retired Air Force Colonel who has long been interested in anthropology and archaeology. He has further developed his interest through classes at UTSA, activities with the Center for Archaeological Research, and by active support of the STAA. For the last two years, Roger has served as Secretary of the association and as an active member of the board.

THOMAS R. HESTER is a native South Texan who completed degrees in archaeology with the University of Texas at Austin and the University of California at Berkeley. Dr. Hester is well known as Director of the Center for Archaeological Research at UTSA and professor of anthropology. Tom recently completed a major book on South Texas archaeology (see book review on page 1).

RICHARD, BEN, and MIKE McREYNOLDS are brothers who grew up around Poteet in Atascosa County in southern Texas. They all have an abiding interest in collecting Indian artifacts and have previously reported in this journal on artifacts from the San Miguel Creek area of McMullen County. Richard is responsible for the very excellent illustrations included in their article; he is also working on an in-depth look at *Nueces* scrapers which have been found in McMullen County.

J. B. SOLLBERGER is well known to readers of this journal (see October 1978 issue) and to most people in Texas who are interested in archaeology. "Solly" lives in Dallas and has demonstrated his flint knapping skills at several quarterly meetings of the STAA.

FRED STROSS is a member of the archaeological research facility of the University of California at Berkeley. Dr. Stross has collaborated with Hester and Asaro on a number of research projects dealing with obsidian trace element analysis.

FRANK A. WEIR has been director of archaeological studies with the State Department of Highways and Public Transportation since 1970; he holds two degrees from the University of Texas at Austin and completed his doctorate with Washington State University in 1976. His dissertation, a definitive look at the Central Texas Archaic, has become the major authoritative source of the Archaic phases of the region.

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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		<u>Hospitality & Registration Committee</u>
		Chairwoman - June Carter (S.A.)