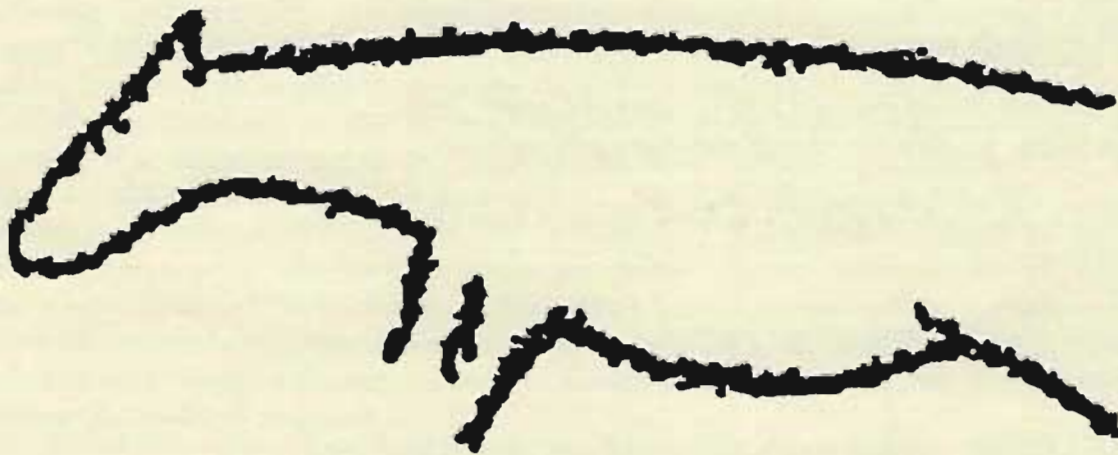


ANCIENT ECHOES



**VOLUME 2
2003**

**JOURNAL OF THE
HILL COUNTRY
ARCHEOLOGICAL
ASSOCIATION**

ANCIENT ECHOES

JOURNAL OF THE HILL COUNTRY ARCHEOLOGICAL ASSOCIATION

VOLUME 2
2004

Deborah Bauer, Cindy Harrington,
and Bryant Saner, Jr., Co-Editors

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ABOUT THE COVER: A pictograph, sketched from the Hatfield Rock Shelter, 41KR493

MANUSCRIPTS: Send manuscripts to the Hill Country Archeological Association, P. O. Box 290393, Kerrville, Texas 78028

MEMBERSHIP: Contact the Hill Country Archeological Association at P. O. Box 290393, Kerrville, Texas 78029-0393

Library of Congress Number, pending

ISSN No. 1542-6939

The Hill Country Archeological Association is a non-profit organization and all contributions are tax deductible.

SHOVEL TESTING AT FORT MARTIN SCOTT, 41GL52, GILLESPIE COUNTY, TEXAS

Bryant Saner, Jr.

ABSTRACT

Shovel tests were done instead of post holes for 12 information stations at Ft. Martin Scott. Prehistoric and historic artifacts were recovered. The area tested was very limited and very little information could be added to the body of knowledge that already exists. Artifacts and information from previous investigations correspond with what was found during this shovel testing. A prehistoric component will be discussed.

INTRODUCTION

Fort Martin Scott (41GL52) is located about two miles east of downtown Fredericksburg on the north side of Highway 290. It is owned by the city of Fredericksburg and managed by the Gillespie County Historical Society (GCHS). The GCHS planned to place 12 posts in the ground to install stations that will provide information about the fort and the buildings that were once there. On June 28, 2002, Paul Camfield, director of the GCHS, wrote a letter to the Texas Historical Commission to determine if an antiquities permit was required. His letter was returned in July stamped, "No historic properties affected, project may proceed" (Fig. 1). Mr. Camfield contacted the Hill Country Archeological Association (HCAA) in August 2002 about doing shovel testing at Ft. Martin Scott. The shovel tests would take the place of the proposed post holes. On September 14, 2002, the shovel testing was conducted. In November of 2002, Mark Denton, director of the Antiquities Division of the Texas Historical Commission, was contacted to determine if a report must be generated from the shovel testing since no antiquities permit was needed for the work done. Mr. Denton replied that a short report would be adequate.

Fredericksburg was founded in 1846 by a group of German settlers. The primary occupation of these settlers was farming. In 1848, Fort Martin Scott was built east of Fredericksburg on the west side of Barons Creek as part of the frontier Indian defenses. It was first known as Camp Houston when it was established. The name was changed to Fort Martin Scott in 1849 in memory of Major Martin Scott who was killed in 1847 in the war with Mexico (Labadie 1987). Trade was established with local German settlers to supply the fort with necessary supplies (Jordan 1966). The Mormons established a settlement called Zodiac on the Pedernales River about two miles east of the fort in 1847. The Mormons assisted with the construction of the fort. The troops purchased goods from the Mormons until 1851, when Zodiac was destroyed by a flood and the settlers moved away (Bieseke 1930). In December 1853, the fort was closed because the frontier was pushed westward, and it was no longer needed as defense from the Indians.

The fort may not have been owned by the Army. It appears that a Mr. Twohig was the owner of the property during the time the Army occupied it. In December 1853, he leased the property to Mr. Frischmeyer for a one-year period. (Labadie 1987). It was occasionally occupied by Texas Rangers (Hart 1964). It was used by Confederates during the Civil War as a mustering station. Gillespie County voted against secession, and the Confederate Army did not occupy the fort on a permanent



GILLESPIE COUNTY HISTORICAL SOCIETY

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TEXAS HISTORICAL COMMISSION

June 28, 2002

Mark Denton- Director
Archeological Division, THC
P.O. Box 12276
Austin, TX 78711-2276

Dear Mark,

I am writing you with regard to some work I am pursuing this summer at Fort Martin Scott (THC location number 2458), which the Gillespie County Historical has managed for the city since January 2001. We are now getting ready to reposition and install the information stations that were in place at the various building locations years ago to coincide with the self-guided walking tour that we offer our visitors. These stations will once again be set on a wooden post of some kind and set about 2-3 feet in the ground. What I need from you is the protocol or documentation I need to provide you so I can dig the holes and place the posts in the proper locations.

Right now there are about 5 or 6 still in the ground, but I am not sure they are situated in the right place and they might need to be moved as well. Total station stops will be between 21-24. I look forward to hearing from you in the days ahead and if there are any questions concerning scheduling a personal visit to the Fort please do not hesitate to call. My cell phone number is 830 459-2704. Take care and thanks for assisting me in this matter.

Respectfully Submitted

Paul Canfield
GCHS Executive Director

NO HISTORIC
PROPERTIES AFFECTED
PROJECT MAY PROCEED

By
for F. Lawrence Oaks
State Historic Preservation Officer

Date

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E-Mail: gchs@gctsc.net WEB-SITE: www.gillespiehistoricalsociety.com

Figure 1: Letter from Gillespie County Historical Society to the Texas Historical Commission regarding work to be done at Fort Martin Scott.

basis. In 1866, the US Army used the fort for less than a year to reduce Indian attacks on the frontier. No military units occupied Fort Martin Scott after 1866 (Brooks 2002).

In 1870, a man named John Braeutigam purchased the property. He improved some of the existing buildings to make a residence. Braeutigam established a store, saloon, racetrack and dance hall on the site. It was called "Braeutigam's Garten". In 1884, he was killed and the "Garten" was closed for good. The Braeutigam family lived on the site until they sold it to the city of Fredericksburg in 1959 (Labadie 1987). During this time, old Highway 290 was built through the western edge of the original fort. The present-day Highway 290 is 50-100 feet west of the old highway. Some remnants of the old road can be seen (Fig. 2).

SOILS

The low terrace along the west side of Barons Creek is in a flood plain with associated alluvial deposits (Barnes 1986). Frio and Guadalupe soils, channeled, are found along the creek on the eastern edge of Fort Martin Scott. On the northeast portion of the site is Guadalupe loam. Hensley loam is seen in the center of the site extending to the north boundary. Pedernales fine sandy loam is seen paralleling Highway 290, extending from south to north (Allison et al; 1975).

METHODOLOGY

Twelve stakes were placed in the ground to mark the location of the posts to hold the information stations prior to the arrival of the field crew. Standard measurement is used because this is a historic site. The diameter of the shovel tests was 12 inches and was excavated in 5-inch levels. The post holes were 20 inches deep. The shovel tests were 20 inches or less in depth. If clay or rock was encountered at depths of less than 20 inches, the shovel test was terminated at the bottom of the level in progress. When each shovel test was completed, a worker would finish the holes if they were terminated before reaching 20 inches, and place the posts in them. The holes were filled with concrete to secure the posts. Dirt was placed on top of the concrete to create a natural soil surface look.

In the field, the artifacts that were collected from each level were placed in plastic bags along with an identification tag with the appropriate provenience information. All level bags from each shovel test were placed in a bag with an identification tag with the appropriate information. In the lab, artifacts were identified, separated by class and placed in plastic bags. A log number was assigned to each bag and a written inventory produced. After analysis of the artifacts was completed, a report was written and published in an appropriate archeological journal and a copy sent to Mark Denton of the Texas Historical Commission. The artifacts were curated at the Center for Archaeological Research at the University of Texas at San Antonio.

PREVIOUS INVESTIGATIONS

The previous archeological investigations at Ft. Martin Scott have focused on the historic components at the site. To be more specific, these investigation references concentrated on the

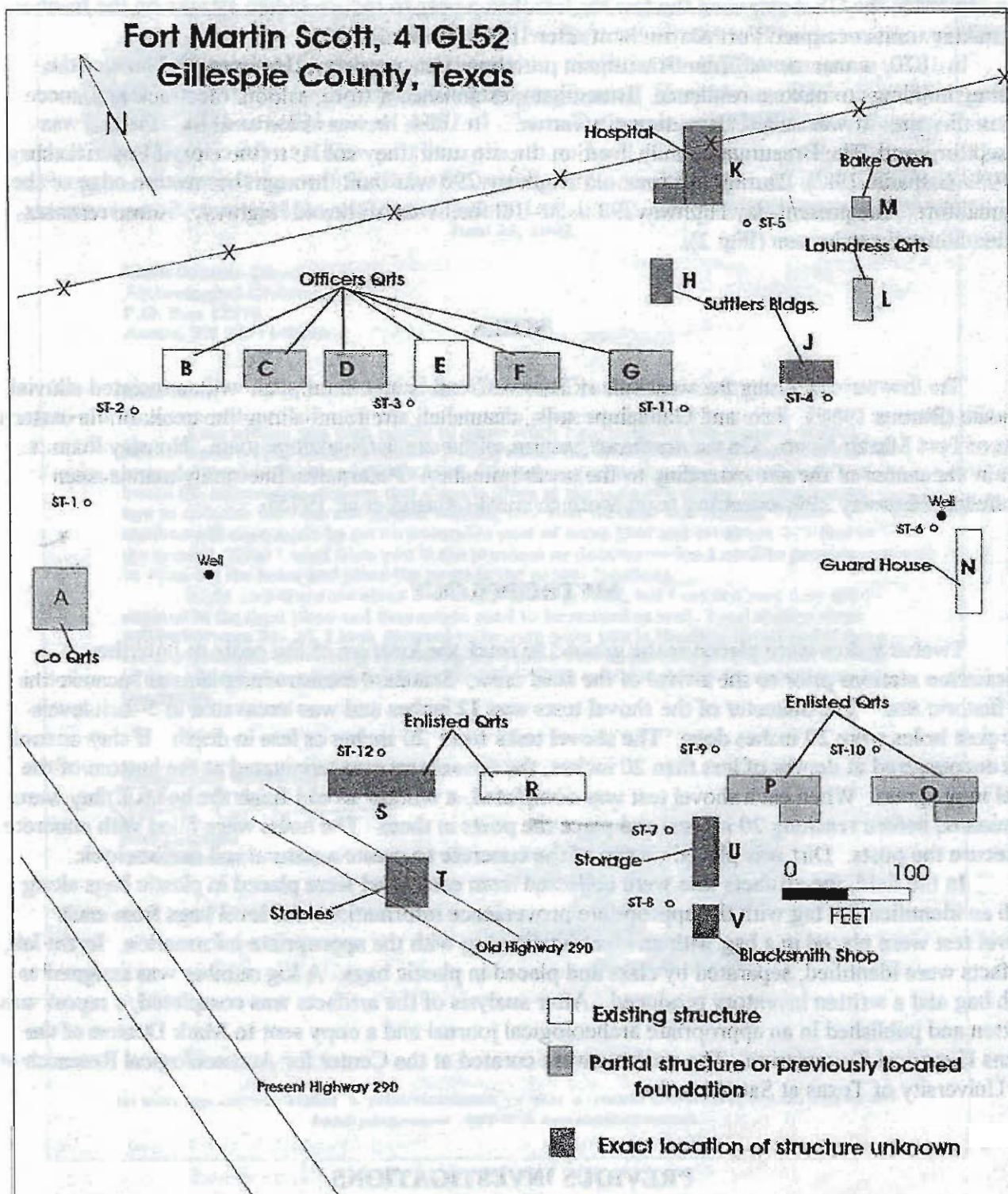


Figure 2: Site map of Fort Martin Scott, 41GL52, with shovel test locations. Portion of this map were taken from Freeman (1853), Kegely (1994) and Labadie (1987).

location of structure foundation present during the military use of the site.

In 1986, the Center for Archaeological Research at the University of Texas at San Antonio did the first archeological investigation to locate some of the foundation or footings of structures no longer visible above the surface. Remnants of buildings A, B, E, G, J (Suttler's Store), M and O were found (Labadie 1987).

In 1991 and 1992, the Travis County Archeological Society and the Archeological Resources Evaluation Associates conducted an archeological investigation at Ft. Martin Scott. Buildings C and P were located and building B was relocated (Kegley 1994).

In 1996, Lone Star Archeological Services conducted extensive excavation to locate buildings A and R. Plans to reconstruct building R were developed from the data gathered (Lone Star Archeological Services 1996).

In 2001, Prewitt and Associates, Inc. conducted a survey on a 68 acres of land located on the east side of, and adjacent to, Barons Creek. The land is directly across the creek from Ft. Martin Scott. The land is the future site of the Texas Tech satellite campus at Fredericksburg. Two sites were recorded (Blake and Freeman 2001). This survey was followed up by a more extensive investigation, including test units and backhoe trenches, a short time later (Ringstaff and McWilliams 2002).

In March of 2002, the Texas Historical Commission and the Hill County Archeological Association conducted a magnetometer survey in an attempt to locate the foundations of buildings located in the northeast corner of the site. The results were inconclusive based upon the limited data collected (Saner 2002).

SHOVEL TEST

Twelve shovel tests were excavated at Ft. Martin Scott in place of post holes. The purpose of the shovel test was to determine if any subsurface features would be affected by the post holes. The structures and land that comprise the fort have been disturbed numerous times over the last 150 years. A Munsell Soil Chart was not available to obtain soil color during the survey.

Shovel Test 1: Is located near Building A, the commanding officer's quarters. In Levels 1 and 2 reddish-brown, moderately-packed, sandy, clayey, loamy soil with less than 1% gravel is seen.

A fragment of aqua glass and a chert flake were recovered in Level 1. Level 2 yielded 14 bone fragments, 7 chert flakes, a chert core and some dark gray to black nodules that appeared to be asphalt. Level 3 had no artifacts. The shovel test was terminated at 12 inches below surface due to hard clay.

Shovel Test 2: Is located near Building B which was one of the officer's quarters. In Levels 1 and 2 reddish brown moderately-packed, sandy, loamy soil with 10-20% gravel is present. Starting in the floor of Level 2 and extending into Level 3 is reddish-brown, hard-packed sandy clay with less than 1% gravel. The shovel test was stopped at 12 inches below surface due to hard clay.

Level 1 yielded 3 small burned rocks, 5 chert flakes and a cut nail fragment. The artifacts recovered in Level 2 were 2 chert flakes and 1 cut nail. No artifacts were recovered in Level 3. The shovel test was terminated at 12 inches below surface due the hard-packed clay.

Shovel Test 3: Is located near Building E which was one of the officer's quarters. In Levels 1 and 2 brown, moderately-packed, sandy, clayey, loamy soil with 5-10% gravel in level 1 and 20% gravel in Level 2 is seen.

Level 1 had 2 burned rocks and 6 pieces of some dark gray to black nodules similar to that

found in Shovel Test 1, Level 2. No artifacts were recovered from Level 2. The shovel test was terminated at 10 inches below surface due to recovering no artifacts and white, chalky material in the floor of Level 2.

Shovel Test 4: Is near where the Suttler's Store would have been located. No remnant of this building is seen on the surface. Portions of the foundation were identified in a previous excavation (Labadie 1987). This was one of the Suttler's Store buildings. In Levels 1 and 2, dark reddish brown to brown, soft-packed, sandy, loamy soil with less than 1% gravel is noted. In Level 3, moderately-packed, brown, sandy clay with no gravel is seen.

Level 1 yielded 2 burned rocks, 1 clear glass fragment and 6 pieces of dark material that appears to be asphalt. Level 2 had 2 chert flakes and 2 metal fragments. Charcoal fragments were noted in this level, but not collected. Level 3 had no artifacts. The shovel test was terminated at 14 inches below the surface due to hard clay and no artifacts in Level 3.

Shovel Test 5: Is near where the hospital was located. No remnants are seen on the surface. In Levels 1 and 2 reddish-brown, moderately-packed sandy, clayey, loamy soil is seen.

Level 1 had 1 bone fragment and 9 chert flakes. Charcoal fragments were noted, but not collected in this level. Level 2 had no artifacts. Both levels have 15-20% gravel and 15% cobbles to 10-15 cm diameter are seen. The shovel test was terminated at 10 inches below surface because no artifacts were recovered and large immovable stones were in the floor of Level 2.

Shovel Test 6: Is near building N, the guardhouse. Level 1 had brownish moderately packed sandy, clayey soils with less than 1% gravel. Level 2 had brownish, moderately hard-packed, sandy clayey soil with less than 1% gravel.

Level 1 yielded 1 .22 caliber shell casing, 5 chert flakes and metal-like fragments. Level 2 had no artifacts. This shovel test was terminated at 10 inches due to no artifacts seen in Level 2 and hard clayey soil.

Shovel Test 7: Is near where the storage area, building U, was located. No remnants of this building is seen on the surface. Levels 1,2,3 and part of 4 have brown, soft-packed, sandy, clayey, loamy soil with less than 1% gravel. Level 4, starting at 18 inches below the surface, has reddish-brown moderately-packed, sandy, clayey soil.

Level 1 had no artifacts recovered. Level 2 had 2 chert flakes, Level 3 had 3 chert flakes and Level four had 1 chert flake. The shovel test was terminated at 20 inches below surface because it reached the maximum depth.

Shovel Test 8: Is located near the blacksmith shop, building V. No remnants of this structure remain. Level 1 has light reddish brown, moderately-packed, sandy, clayey, loamy soil with less than 1% gravel. Levels 2, 3 and 4 are brown, soft-packed sandy, clayey, loamy soil with less than 1% gravel.

Level 1 had a single chert flake. Level 2 had 1 bone fragment, 2 chert flakes and 1 burned rock. Level 3 had 1 chert flake, 1 amber glass fragment and 1 cut nail. The shovel test was terminated at 20 inches below surface because this is the maximum depth of the post holes.

Shovel Test 9: Is located near one of the enlisted barracks, building P. No remnants of this building are seen on the surface. Level 1 has brown, moderately-packed sandy, clayey loamy soil with less than 1% gravel. Level 2 has dark brown, moderately-packed sandy clayey soil with less than 1% gravel.

Level 1 had 1 bone fragment. Level two had no artifacts. The shovel test was terminated at 10

inches below surface due to no artifacts recovered in level 2 and hard clay soil.

Shovel Test 10: Is located near one of the enlisted barracks, building O, identified by Labadie (1987). Level 1 has reddish-brown, moderately-packed, sandy, clayey, loamy soil with less than 1% gravel. Level 2 has brownish, moderately-packed, sandy, clayey, loamy soil with 1-5% gravel. Level 3 has dark brown, moderately-packed, sandy, clayey soil with 1-5% gravel. Level 4 has dark brown, moderately-packed, sandy, clayey soil with less than 1% gravel.

Level 1 had 1 chert flake while level 2 had 1 burned bone fragment. Levels 3 and 4 had no artifacts. The shovel test was terminated at 20 inches below surface because the maximum depth was reached.

Shovel Test 11: Is located near one of the officer's quarters, building G, identified by Labadie (1987). Level 1 has brownish, moderately-packed, sandy, clayey, loamy soil with less than 1% gravel. Level 2 has brownish, moderately-packed, sandy, clayey loamy soil with 1-5% gravel and 2 cobbles 6 inches in diameter. Level 3 has brownish, moderately-packed, sandy, clayey, loamy soil with 5-10% gravel.

Level 1 had 4 bone fragments, 1 biface fragment and 1 cut nail fragment. Level 2 had 1 chert flake. Level 3 had no artifacts recovered. The shovel test was terminated at 15 inches below surface due to no artifacts in Level 3 and increase in amount and size of gravel.

Shovel Test 12: Is located near where one of the enlisted barracks was located. There are no remnants of the structure seen on the surface. Levels 1 and 2 have brownish-red, moderately-packed, sandy, clayey soil with less than 1% gravel. Level 3 and 4 have brownish-red, moderately-packed, sandy, clayey soil with an increase in clay from Levels 1 and 2. Less than 1% gravel is seen in Levels 3 and 4.

Level 1 had 1 modern, brown ceramic insulator fragment and 1 modern concrete fragment. Level 2 had 2 modern brown ceramic insulator fragments and 1 thin biface fragment. Level 3 had 1 cut nail and Level 4 had 5 modern, brown ceramic insulator fragments, 1 cut nail and some dark gray to black nodules of what appears to be asphalt. The modern insulator fragments are all part of the same insulator. The shovel test was stopped at 15 inches below surface due to no artifacts in Level 3 and an increase in gravels.

ARTIFACTS

Bone fragments comprised 19% of the total artifacts recovered and were the second most common type of artifact recovered. Bone was found in Shovel Tests 1, 5, 8, 9 and 11. Of the 46 specimens recovered, only one of the fragments was burned. The specimens are soft. No complete bones were recovered. One bone from Shovel Test 5 is possibly a bird bone. The other bones are unidentifiable.

A total of 8 brown ceramic, modern insulator fragments were recovered from various levels in Shovel Test 12. They are from one insulator that was broken. The artifacts are very similar to the ones seen on the electric poles in and around the site. They comprised 6.9% of the artifacts.

Burned rock was an uncommon find during the testing. Only 6 pieces were recovered from Shovel Tests 2, 3 and 8. The burned rocks are isolated finds and make up 5.1% of the artifacts recovered. No burned rock features were identified. Glass fragments comprised 2.6% of the total artifacts recovered. Each of the 3 glass fragments is a different color. Shovel Test 8 had 1 amber glass

bottle fragments, Shovel Test 1 had a aqua glass bottle fragment, and very light purple slightly curved glass fragment was in Shovel Test 4.

The amber glass is a thick wall fragment of a bottle. According to Ann A. Fox (2002), a historical archeologist at the Center for Archaeological Research at the University of Texas at San Antonio, this type of bottle was common in the late 1800s and was generally used for liquor and beer containers. The dark color is to protect the contents from being damaged by sunlight. Nickel is added to the glass during manufacture to make it brown or amber in color (Polak 2000).

"Aqua glass" can vary in color from pale blue to light green. The color is created by naturally occurring iron in the sand used to make glass. This type of glass was commonly seen in pre-1900 bottles. However, some aqua glass is seen after 1900. An example is the Coca Cola bottle (Munsey 1970).

The very light purple, slightly curved glass fragment is part of an unidentified item. The color of the glass gives a clue to the time period it was made. In 1880 glass makers discovered that adding manganese to the glass during manufacture would result in clear glass. Methods to package food in bottles were developed about this time and clear glass was important so the customer could see the contents. When glass containing manganese is exposed to the ultraviolet rays of the sun, it will turn purple. The addition of manganese to glass ceased in 1914. Germany was the largest supplier of manganese and when World War I started in 1914, shipments stopped (Munsey 1970).

Lithics is the most common artifact class recovered. A total of 46 or 39.6% of the total assemblage was lithics. Shovel Test 1 had flakes and a core/tool recovered and shovel test 12 had 2 biface fragments recovered from it. All the other shovel tests had only flakes recovered, except for 3 and 9, which yielded no lithics at all.

Of the 46 lithics recovered, two are thinned biface fragments and one is a core/tool, while the remaining lithics are flakes. The vast majority, 33 (80%) of these, are small tertiary flakes. There are 5 (12%) small secondary flakes and 2 (8%) small primary flakes.

A total of 10 metal items was recovered. Shovel Tests 2 and 12 had 2 cut nails each, while Shovel Tests 8 and 11 had 1 each. Shovel Tests 4 and 6 had 2 fragments each of unidentified metal. Metal is 8.6% of the total recovery.

Metal nails, known as wrought nail, were made by hand until the mid-1700s. At this time, a method was devised to cut the nails from rolled, flat sheets of metal, the heads were made by hand. These nails are called cut nails. In the 1830s, a mechanical method was developed to make the heads. This style of nail was very common until the early 1800s. The round wire cut nail was developed in the 1860s and called wire nails (Wells 1998). The wire nails were used on a limited basis in the late part of the 1880s. By early 1890s, the wire nail had gained in popularity and by the late 1890s it was the most popular nail on the market (Adams 2002).

In Shovel Test 12 a modern concrete fragment was recovered. In 2001 a modern reproduction of building R was completed. Concrete was used in the foundation of this structure (Camfield 2002). This could be the source of the fragment. The subsurface recovery of modern materials indicates disturbance of the soil.

In Shovel Test 6, a .22 caliber rim fire brass shell casing was recovered. It is a well-preserved artifact. This is the most popular of America cartridges. It was first developed by Smith and Wesson in the late 1850s. It has changed very little since that time. The .22 caliber shell is still available today (Logan 1959).

A total 19 small, dark gray to black nodules were recovered from Shovel Tests 1, 3 and 12.

These appear to be tar or asphalt. Old Highway 290 was located east of the present-day Highway 290, crossing the western portion of Ft. Martin Scott (see fig. 2). These nodules are probably tar and asphalt left behind when the old highway was removed. They were scattered over the site by later disturbances.

DISCUSSION

The land in and around 41GL52 was occupied by prehistoric people, the military and civilians for many years. Each left physical remnants that can give clues to the habits of these people. These occupants changed the land in many ways by creating new structures, moving soil and disturbing the materials left by the previous inhabitant. This activity changed the original provenience by moving the artifacts horizontally and vertically over the site. Breakage of the artifact is also encountered. This creates difficulty when trying to interpret the artifacts that were recovered.

A total of 46 lithic artifacts was recovered indicating that it is highly likely that this site was used by prehistoric people. No temporally diagnostic artifacts were recovered so a time period for the prehistoric occupation cannot be established. Labadie (1987) did recover lithics and several chert tools. Kegley (1994) recovered lithics, chert tools and several prehistoric diagnostic artifacts. These were a Perdiz arrow point and a Frio dart point. Lone Star Archeological Services (1996) recovered lithics, chert tools and a Pedernales dart point. The Pedernales dart point represents a time of 2500 BC to 1000 BC, the Frio dart point is found from 200 BC to 600 AD and the Perdiz arrow point is from 1200 AD to 1500 AD. This indicates that Indians have used this site long before the Europeans came to the Texas Hill Country (Turner and Hester 1999). It is suggested that the prehistoric component of 41GL52 be investigated further.

The shovel testing done covered a very small portion of the site, giving a very small peek at the past. Shovel Test 7 and 8 appear to be in disturbed soils. According to Paul Camfield (2002), director of the Gillespie County Historical Society, photographs show the area where these shovel tests were placed was in agricultural use as a field many years ago. The area where Shovel Test 12 was placed is disturbed as indicated by a modern ceramic electric line insulator, modern concrete fragments and a thin biface fragment recovered in the same levels. This area may have been disturbed when a modern reproduction of building R was built in 2001.

The recovery of historic and prehistoric artifacts is expected as indicated by previous investigations. The number of shovel tests are few and randomly spaced across the site. The data adds little to the existing knowledge of Fort Martin Scott. However, one item that does stand out is the lack of investigation of the prehistoric component at 41GL52. The main focus has been on the historic component. This is a very important part of the development of Gillespie County, and the investigation is justified. Investigation of the prehistoric component is lacking and needs to be addressed.

ACKNOWLEDGMENTS

A debt of gratitude is owed to Paul Camfield for his cooperation and hospitality. The project would not have been possible without the hard work of Woody Woodward and Ken Willis. I thank Richard Mahoney for his critique and suggestions for improvement of this report. Thanks go to Barbara Meissner for assistance with identification of the faunal material. George Kegley assisted in the location of references and for this I am grateful.

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ANALYSIS OF A PALEO DART POINT MID-SECTION FOUND IN FRONT YARD OF A HOME IN KERRVILLE, TEXAS

Bryant Saner, Jr.

ABSTRACT

A PaleoIndian dart point fragment was recovered in the front yard of a home in Kerrville, Texas. The fragment is from the proximal portion of the point. It is a small artifact, but gives many clues to its use. Lithic analysis provides most of the information, while microscopic examination revealed some interesting details.

INTRODUCTION

In 1996 a mid-section (Fig. 1) of a Late PaleoIndian dart point was found in the yard of a residence in Kerrville, Texas. It is possible this fragment was part of a projectile used to hunt a large extinct buffalo known as *bison antiquus*.

The biface fragment appears to have had parallel lateral edges, convex to slightly convex base with ground edges. The Barber, Golondrina and Plainview are Late Paleo dart points that fit this description and time period. The Barber is long and slender with parallel to lancelet sides. It is usually widest at the mid-section and occasionally thick. The distinguishing characteristic of the Barber is a deep basal concavity. The Golondrina has a lancelet shape, deep basal concavity (not as deep as the Barber) and basal corner or ears that curve outward. This point can also be thick. The Plainview point has parallel to convex sides. It has a basal concavity that is usually not deeper than 4 mm. All these points have ground bases and ground edges from the corner of bases to one-quarter to one-half of the way towards the point. Lateral oblique flaking is a characteristic of these points (Turner & Hester 1999).

The PaleoIndian period starts about 7500 BC and lasted until about 6800 BC (Turner and Hester 1999). The environment began to get warmer and the large megafauna such as, mammoth and mastodon, were extinct by the this time. However, a large buffalo, *bison antiquus* did survive into this period and was evolving into the modern buffalo, *bison bison* (McDonald 1981) The *bison antiquus* is one-third to one-half larger than the one seen today. The extinct animal had horns that came out away from the head and had a slight upward curve. The modern bison horns are shorter and curl up toward the top of the head (Johnson and Martin 1990).

The grinding of the base and proximal lateral edges is believed to prevent the binding material from cutting or splitting the shaft during use. The edges of a non-ground dart point can be very sharp. If the spear is thrust or thrown into an animal, a non-ground base would be more likely to split the shaft that attaches to the point. Meltzer (1987) suggests that after the animal is killed, the Clovis point is used to butcher the animal. This can be expanded to include other PaleoIndian points. If the spear is held by the shaft and used as a cutting or skinning tool, the pressure exerted on the binding material could cut it. The grinding could be to decrease the possibility of the shaft splitting or the binding material being cut (Meltzer 1987).

Plainview dart points were found associated with *bison antiquus* at Bonfire Shelter bison jump

site in Val Verde County, Texas (Dibble and Lorrain 1968). A bison jump is a location where the bison are stampeded toward a cliff and run over the edge. In the panic the herd is unable to stop and falls into the depths of the canyon. Many of the animals are killed or severely injured. The pursuers then move in and kill the wounded ones and butcher the animals. Bonfire Shelter is one of the oldest known jump sites in America (Dibble and Lorrain 1968).

The Gamenthaler Valley in Gillespie County produced Plainview and Barber points (Kelly 1987). Plainview dart points were documented as surface finds and Barber points were recovered during excavations. Several Plainview and Golondrina dart points were recovered and documented in southern Kerr County by Sollberger and Hester (1972).

ARTIFACT DESCRIPTION

The biface fragment appears to be a portion of a complete or near-complete specimen of one of the three types previously discussed. The fragment is of a fine-grained chert material, white in color. Inspection of some of the deeper flake scars, including the medial hinge fracture, reveals a darker, brownish color chert (Fig. 2). The white coloration could be due to intense patination of the biface surface. Patination is the loss of minerals from the surface of an artifact which results in the surface being a lighter color. This change is commonly caused by weather. Patination does not always indicate that the artifact is of great age (Gumbus 1997). Collins (1999) describes patina as the surface of siliceous stone that has been weathered or chemically changed. This process is usually a slow one.

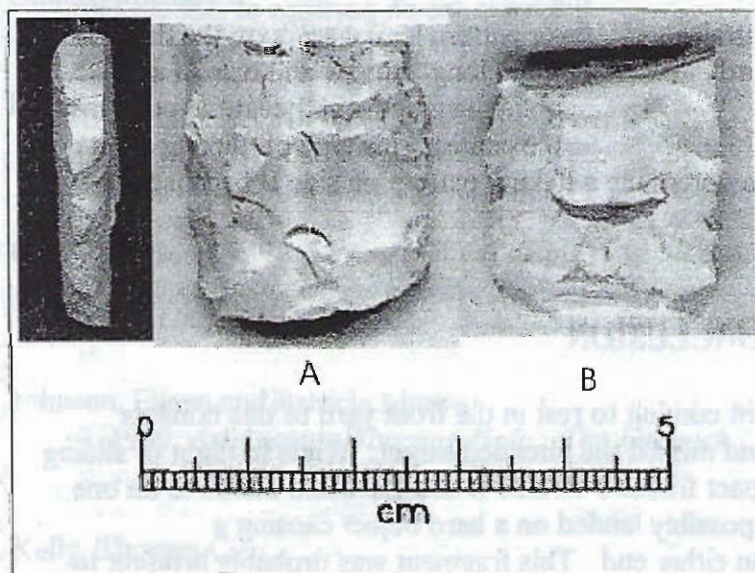


Figure 1: Photographs with lateral, dorsal and ventral of artifact. Photographs by James Partain of Partain Studios.

Numerous modification were noted on the bifacial fragment. The edges appear to be parallel despite the fracture along one edge. On each end of the fragment the break curves over to the flat surface. These are called hinge fractures. On one portion of one lateral edge is a fracture that is perpendicular to the flat surface. This is a burin fracture. The long, shallow flake up the middle on side B is called an impact fracture. In the deep, terminal end of this fracture is chert of a dark color. A portion of one lateral edge is ground. The maximum length of the fragment is 24 mm; maximum width is 23 mm; maximum thickness is 4 mm; length of the impact fracture is 13 mm; width is 11 mm and the depth is less than one mm. Examination under 80X microscopy revealed brownish-red, small grained, microscopic sand in two of the small flake scars on side a and two of the large flake scars on side b of the artifact.

DISCUSSION

This projectile point fragment came from the proximal end close to but not at the base. The lateral ground area suggest it came from this location. Patina appears to be more common on Late Paleo points found on the surface. According to Dr. Harry Shafer (2002), an archaeologist at the Center for Archaeological Research at the University of Texas at San Antonio, the hinge fractures, similar to the ones on either end of the fragment, are usually caused when the flat surface of thin chert

bifaces land on a hard surface. Director of the Center for Archaeological Research at the University of San Antonio Dr. Steve Tomka (2002) indicates that the burin and impact fractures are caused when the distal tip hits a hard object, such as a rock, with force. Tomka also believes that the breaks at either end of the fragment may also be caused by impact.

It is most probable this artifact is a fragment of one of the Late Paleo point types previously discussed. There is edge grinding on part of one lateral edge. The other edge has been broken. Oblique lateral flaking is seen on portions of side A. This flake pattern leaves scars on the flat surface that are long, narrow and extend at an oblique angle from the lateral edge toward the center. This type of flaking does not

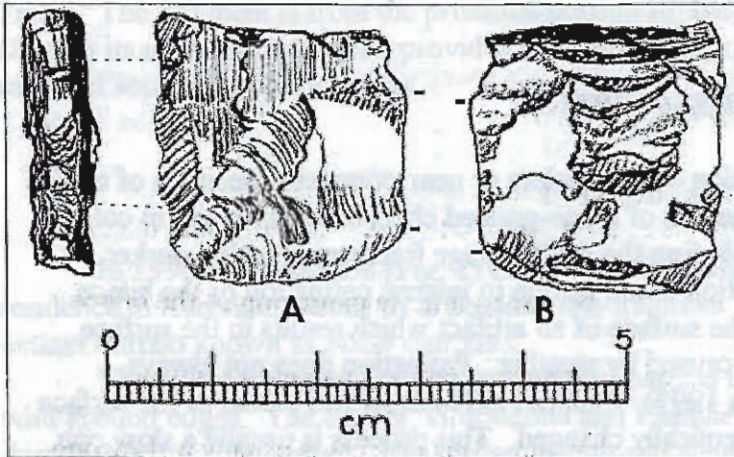


Figure 2: Illustration of lateral, dorsal and ventral view of artifact. Drawing by Woody Woodward

always cover the entire surface. It is difficult to determine a flaking pattern on side B because it is partially obscured by the impact fracture.

CONCLUSION

The scenario for this dart point fragment coming to rest in the front yard of this home is complicated. The dart probably was thrown and missed the intended target. While in flight or sliding across the ground, it hit a rock causing the impact fracture on side B and the burin fractures on one lateral edge. When it finally hit the surface, it possibly landed on a hard object causing a perpendicular break with hinge fracture seen on either end. This fragment was probably brought to this location in the fill dirt for the yard. The brownish-red sand seen under microscopic examination is not found in the immediate area. The exact source of the fill dirt is unknown. However, reddish-brown fine sandy loam is found in the Pedernales series soil seen in central Gillespie County (Allison, et al. 1975).

It is highly likely this fragment was part of a complete dart point manufactured in the Late PaleoIndian time period, possibly a Barber, Golondrina or Planview dart point type. Specimens of these types of points have been recovered and documented in the area. It is a possibility the

manufacturer of this point hunted the *bison antiquus* and other extinct game that roamed the area landscape thousands of years ago.

ACKNOWLEDGMENTS

Thank you to the owners for allowing me to analyze and document this artifact. Dr. Steve Tomka and Dr. Harry Shafer of the Center for Archaeological Research provided valuable insight in the lithic analysis of the artifact. The Center for Archaeological Research was very kind to allow the use of a microscope during analysis. The editing of this report by Kay Woodward is greatly appreciated. A debt of gratitude is owed to Richard Mahoney for his critique and suggestions for improvement of this report. A thank you goes to Woody Woodward for the excellent artifact illustration.

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FOUR METAL PROJECTILE POINTS FROM THE HILL COUNTRY OF SOUTH CENTRAL, TEXAS

Bryant Saner, Jr., Kay Woodward and Woody Woodward

ABSTRACT

Metal projectile points are an uncommon find in the Texas Hill Country. Three metal arrow points and metal projectile point of various sizes are examined. The literature has some descriptions of metal projectile points from the surrounding area. Gross observations, microscopic examination, and measurements are given for the four artifacts. The literature is examined for reports of metal projectile points from the region. This report includes the results of the research and analysis of the data.

INTRODUCTION

In 1649 or 1650, Alonso de Leon led an expedition into Nuevo Leon, New Spain. Nuevo Leon is in what is now northeast Mexico, just south of the Rio Grande River near the southernmost part of Texas. His notes of the expedition show that the Indians mostly used stone tips for their arrows but would place metal tips on them when they could obtain metal (Brown 1988).

In the early to mid-1700s some of the Spanish missions in the San Antonio area taught a few Indian converts to be blacksmiths. At one mission in the late 1770s, chisels were given to the Indian occupants. The knowledge and tools to work iron were taken when the Indians would run away from the missions. In the early 1800s the ability to work cold steel was well-known by the Native Americans giving them the knowledge to make metal arrow points. Soon the Indians were making most of the metal arrow points they used (Brown and Taylor 1989). Metal arrow points were made of scraps of iron, gun parts and brass. A preferred type of iron was barrel hoops because they were thin and required less work to make arrow points (Bell 1980). Files and metal arrow points manufactured by Europeans were traded to Native Americans for furs, especially buffalo robes. One dozen points could be traded for one robe. The cost of metal arrow points was nominal to the trader. The furs and robes obtained from the Indians were sold at a great profit (Wallace and Hoebel 1987).

When the Indians were able to obtain firearms, especially muzzle loaders and single shot breach loaders, many continued to use the bow and arrow, as well as use guns. An Indian could shoot more many arrows in the time it took to reload a muzzle loader or single shot rifle (Newcomb 1961).

In 1857 Indians, said to be Comanches, conducted a raid near Kerrville. A group of men from the area followed the Indians as they retreated into western Kerr County. The men followed the trail to about 25 miles west of Kerrville, there a camp was set up. The following morning the Indians were able to move close enough to the camp to take some of the group's guns. They discharged the guns and shot arrows. As a result several men were killed and wounded. One of the men shot with an arrow had a wound that would never heal. About 20 years later, the wound

was probed and a metal arrow point was removed (Bennett 1956). The Indians that attacked him in 1857, used arrows with metal tips.

In 1869, two young boys living near Dripping Springs, Texas were captured by Indians and lived with them for about five years. A book about the time spent with the Indians was written by one of the brothers. In his account he described trading for metal arrow points and making their own. They had their own tools and the metal was traded for or stolen. When he was returned to civilization he was asked about stone arrow points. His reply was that the Indians knew nothing about them and they were from a former age (Smith 1996).

The last Indian raid in Kerr County occurred on October 5, 1878 near present-day Mountain Home, Texas. Four children of the James Dowdy family were tending sheep in the hills about one-half mile from their home when they were attacked by Indians and killed. The wounds were described as bullet, lance and arrow wounds. The hillside nearby was said to have had many arrows on the ground, believed to have been shot at the children as they attempted to escape (Bennett 1956).

PREVIOUS INVESTIGATION

Metal arrow points are recovered infrequently in Texas and are rare finds in the Texas Hill Country. A metal arrow point was recovered in northwest Gillespie County, Texas (McReynolds 1982). Chandler (1984) describes an arrow point with a long stem and narrow blade that was recovered from the banks of the Pedernales River in the early 1900s possibly from Gillespie or Blanco County, Texas. He also describes a point from Comanche County in north central Texas that has a long, narrow blade, pointed shoulders and a wide, expanding stem. Three metal arrow points from Uvalde County, Texas are reported by Ray Smith (1984). The first has a very long narrow blade, rounded shoulders and a slightly expanding, serrated stem. The second has a long blade, slightly pointed shoulders that angle toward the tip from the stem and parallel sides on the stem with slight serrating noticed. The third point has a slightly wider and shorter blade than the others. The shoulders are slightly pointed and angle toward the tip from the stem and the stem is serrated. Chandler (1986) reports a brass arrow point from northwest Bexar County, Texas. Chandler (1993) reports four metal projectile points from Medina County, Texas. Three of the points range from 40.7 to 51 millimeters in length and 18.0 to 19 millimeters wide at the shoulders. The fourth point is 118 millimeters in length, 24 millimeters wide just below the shoulders and has small serrating on the stem. Goebel et al (1987) report a metal arrow point found in McCulloch County, Texas. It has a triangular blade, slightly pointed shoulders that angle toward the tip and a notch in the base. The report indicates that a stem may have been present, but was broken off leaving the notch. Five metal arrow points are reported from Crockett County, Texas. Two of these are from the Ozona area and three are from the Sheffield area. Sheffield is in Pecos County close to the western border of Crockett County. The two points from near Ozona have long narrow blades and serrated stems. They are part of a cache that included copper wire and part of a rat tail file. The three points from near Sheffield vary in length, one is missing the tip and one has a bent tip (Hester 1968).

ARTIFACT DESCRIPTION

Specimen 1 was recovered in western Kerr County, Texas (Figure 1 & 2). The artifact has a long, slender, somewhat triangular blade and an almost parallel stem with serrations on both lateral edges with a curled tip (Figure 1-1a). The shoulders start at the stem, slant toward the tip and are slightly pointed. The lateral view shows the blade toward the pointed end bends slightly down and away from the curl before it curves back over onto side A. Side A has a slightly convex surface while side B is slightly concave.

Microscopic examination of side A reveals rust and minor pitting over the entire surface. There is some deep pitting near the edge of the blade close to the shoulder.

The serration on the right side of the stem when side A is exposed are rusted, but remain well defined. The ones on the left are rusted and less defined. The lateral edge from the base of the stem to the right shoulder is rusted, but well defined. The same portion on the left side is pitted creating a slightly concave appearance. The distal end of the stem is straight. The right and left shoulders were chiseled and are perpendicular to the flat surface of the blade. The distal end of the stem was chiseled at an angle of about 60 degrees from the top view of side A.

The part, side B, of the artifact exposed when the curled portion of the tip is down is rusted with light pitting over the entire surface. There is some deep pitting on the blade just above the stem. Pitting and delaminating are seen near the curled portion. On the left lateral edge a lip is present at the bend.

Measurements were made with side A up. The curled tip max. length is 57.0 mm, max. width is 17.1 mm, max. thickness is 2.3 mm, stem length (long side) is 9.2 mm, stem length is 7.8 mm (short side), stem base width is 6.3 mm, distal stem width is 6.1 mm and max. stem thickness (is at base) is 2.0 mm. The shoulders are uneven therefore the stem is longer on one side than the other. On side A the right stem to shoulder angle is 113 degrees and the left is 117 degrees. The weight is 5.6 grams.

Specimen 2 is from site 41KM208 in eastern Kimble County (Figure 1 & 2). The arrow point is shorter than specimen 1 with a triangular and slightly expanding stem. Small remnants of

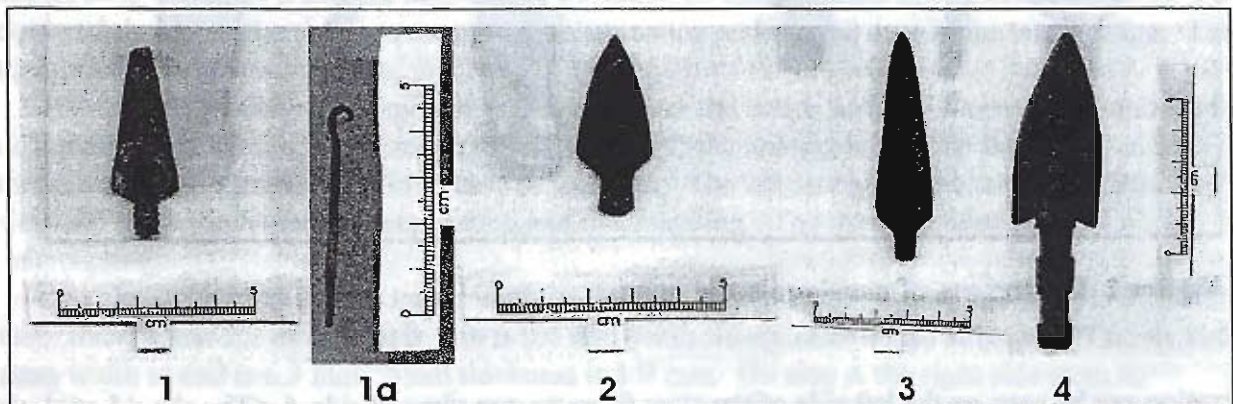


Figure 1 Metal projectile point; 1 western Kerr County, 1a top view of 1 with curled tip, 2 eastern Kimble County, 3 northwest Real County and 4 western Kendall County.

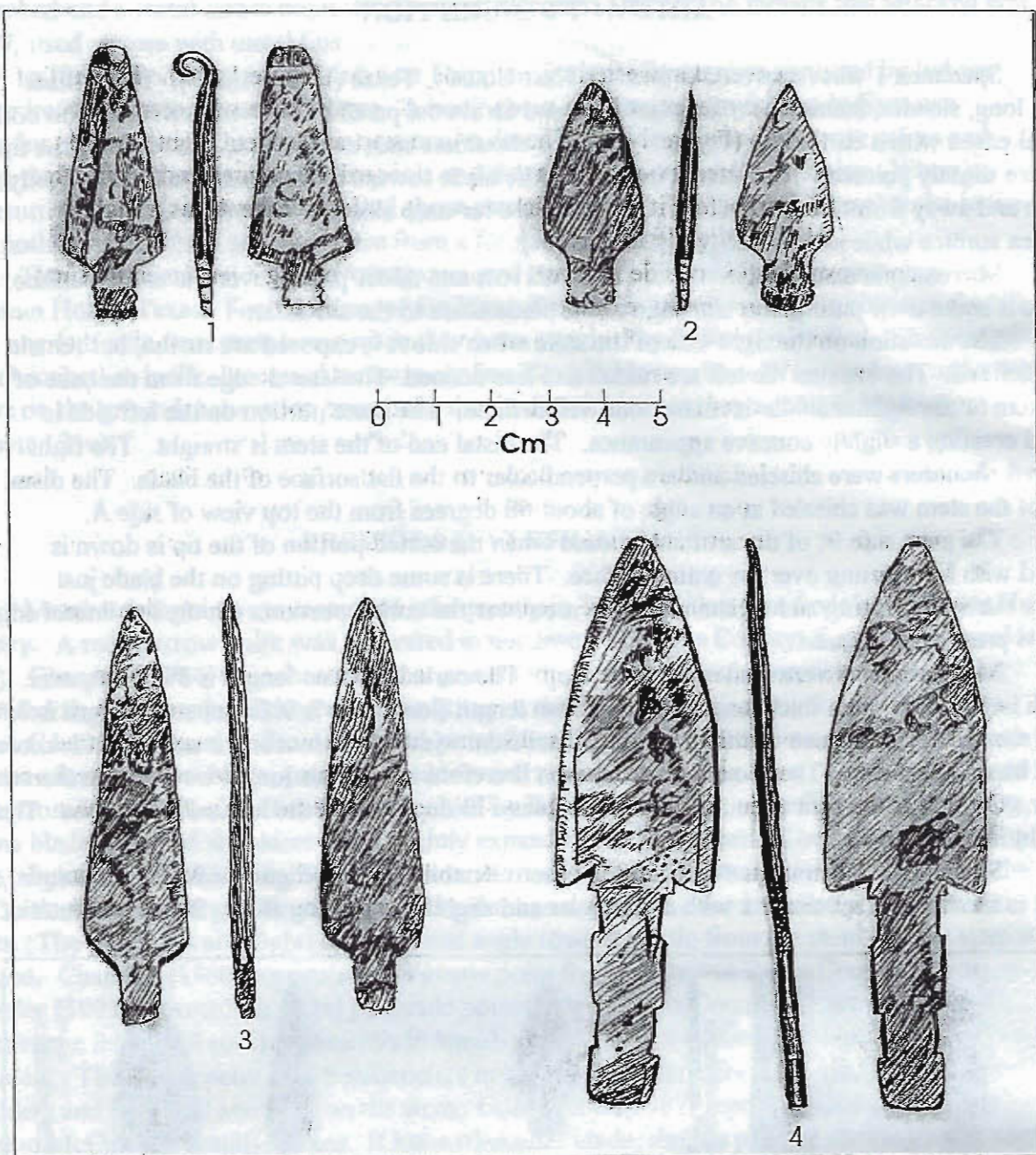


Figure 2 Illustrations of metal projectile points.

serration can be seen on the left side of the stem from the top view of side A. The shoulders slope laterally from the base of the stem to the slightly pointed lateral shoulders.

On side A under 40X microscopic examination pitting is seen over the entire surface.

Delaminating is seen near the distal part of the stem, at the base of the stem, from the left base of the stem toward the right edge of the blade, on the left side of the blade midway up and laterally near the tip. A few serrations on the right side, seen from side A, of the stem are visible. There are rust and some pitting rendering them poorly defined. The serrations on the left side are all visible. They are rusted and not well define.

Side B has rusting and pitting over the entire surface. There is delaminating about one-fourth the way up the stem crossing from the right side to the left. Delaminating is seen near the tip.

This point's max. length is 39.5mm, max. width is 16.8 mm, max. thickness is 2.3 mm, stem length (long side) is 9.0 mm, stem length (short side) is 7.0 mm, stem width at blade is 7.4 mm, stem width at end is 8.0 mm and stem thickness (at base) is 1.9 mm. Shoulders are not even so the stem length will vary for each side. On side A the stem to shoulder angle on the right is 132

degrees and on the left is 130 degrees. The weight is 4.1 grams.

Specimen 3 is a surface find from northwest Real County, Texas (Figure 1 & 2). It has a slightly contracting stem with small serrations on both lateral edges that are barely visible without magnification. The stem and shoulders were chiseled. The shoulders are slightly pointed and angle toward the tip. The blade is long, not very wide and has slightly convex lateral edges. The blade surface is rusted and pitted. Approximately two-thirds of the way up from the stem on side A is a dent going laterally across the blade. It appears that it was hit with a hard object. The one-third from the dent to the tip on side A has some deep pitting visible and on side B from the mid-section to the tip likewise has pitting visible without magnification. At the tip some dulling or possible lipping is seen.

A 40X microscopic examination of side A shows pitting and rust over the entire surface. On the distal end of stem there is pitting, which gives it a slightly concave appearance. The serrations on both sides of the stem are not well defined. The shoulder on the left has two separate chisel marks. The first is seen near the point of the shoulder. The second is near the stem and can be seen from side B. There is pitting on the shoulder giving it a slightly convex appearance. There is a straight dent across the blade 28 mm from the tip. Halfway between the dent and the tip on the right are an area of delaminating and a small dent in the lateral edge. The tip is rounded.

On side B shallow pitting and rust is seen over the entire surface. Deep pitting and slight delaminating are seen on the distal end of the stem. Delaminating is seen on the lateral edge of the left shoulder extending into the base of the stem. The left lateral edge of the blade from the shoulder to the tip has some deep pitting and delaminating. The tip is rounded and has delaminating.

The measurements are max. length is 73.8 mm, max. width (at the shoulders) is 17.6 mm, max. thickness is 2.2 mm, stem length is 9.0 mm (both sides), stem width at blade is 7.6 mm and stem width at end is 6.3 mm. Stem thickness is 1.9 mm. On side A the right side stem to shoulder angle is 138 degrees and the left is 134 degrees. The weight is 8.7 grams.

Specimen 4 is reported to have been found on a ranch in the Comfort, Texas area (Figure 1 & 2). This is the eastern edge of Kerr County or the western edge of Kendall County. It was

obtained from a person that said it was given to him by a person who received it from a landowner who found it on his ranch about 50 years ago. The stem is contracting with pointed barbs near the blade and two shallow, long areas taken from both lateral stem edges. There are cuts in the stem at the distal stem on the right side and two near the base on the right. The shoulders slope toward the stem with barbs at the point of the shoulders. The blade appears parallel from the base of the stem to about one-third of the way to the point. It then becomes contracting to the point. There is grinding along the edges of the blade from the point of the shoulders to the tip. The tip is bent slightly up on side A.

Microscopic examination of specimen 4 reveals rust over the entire artifact with some microscopic pitting on side A and B. Small scratches are seen on both surfaces. Small, parallel scratches that appear to be from grinding are seen on side A and along both lateral edges of the blade. There is some pitting on the end of the stem and at the right angle of the stem and shoulder on side B. The lateral edges of the stem are flat and at a 90 degree angle from the surface. Most of the edges have been rounded.

The measurements are max. length is 101.5 mm, max. width is 27.8 mm at 19 mm from the barbs toward the point, max. thickness is 1.3 mm, stem length is 41.3 mm on both sides of stem, width of stem at blade is 13.2 mm, distal end of stem is 10.6 mm, both indented portions on the lateral edges of the stem near the blade are 1.5 mm deep and 8.5 mm long and the indented areas on the distal stem are 1.1 mm deep and 8.1 mm long and stem thickness is 1.5 mm. On side A the right stem to shoulder angle is 56 degrees and the left is 55 degrees. The weight is 14.9 grams.

The dimensions of all the artifacts were taken with an electronic digital caliper. However, since the tip of specimen 1 is curled, the length was measured with a cloth, metric tape by placing the tape on the distal end of the stem, and running the tape along the flat surface to the tip and curling it around the tip. This method of measuring the length was less accurate than with calipers so only millimeters, no tenths, could be determined. The weight of each point was determined with an electronic digital scale. Microscopic examination was done with a 40X microscope.

SUMMARY AND CONCLUSION

Metal projectile points, specifically arrow points, were used by Indians as early as the mid 1600s. By 1800 the ability to work cold steel was well known among Native Americans. The metal and tools to make projectile points were traded for or stolen. Europeans also manufactured metal arrow points to trade with the Indians for furs and buffalo robes. The earliest date reported for metal arrow points used by Indians in Kerr County is 1857. They were used during a skirmish about 25 miles west of present day Kerrville near the headwaters of the North Fork of the Guadalupe River. By the 1860s most of the Indians had firearms, but continued to use the bow and arrow. Many firearms of that time were breech loaders and allowed only one shot then had to be reloaded. By the time reloading was complete the bow could fire many arrows. In the last raid in Kerr County in 1878 rifles, lances and arrows were used. This confirms that Indians used firearms and the bow and arrow at the same time. By the late 1870s raids in this area stopped.

Serrations are seen on the stems of specimens 1, 2 and 3 and none are seen on specimen 4. They are difficult to see on the first two, without the use of a microscopic. The serration may have been cut shallow when the point was made. Exposure to the elements for many years caused the deterioration of the metal, reducing the size of the serration. Some of the serrations on specimen 3 are visible without magnification.

The thickness of specimens 1, 2 and 3 are almost identical, while specimen 4 is almost 1 mm thinner. The surface of the first three metal projectile points are much more deteriorated than the last one. Deterioration is almost none existent on Specimen 4. Specimen 4 is more symmetrical than the first three and it appears that it was made with a metal punch. The exact age of the projectile points is unknown. It is probable specimens 1, 2 and 3 are not more than 200 years old and specimen 4 is not more than 50 to 100 years old. Thomas Hester, former director of the Texas Archeological Research Laboratory at the University of Texas at Austin believes they are modern and probably no older than 50 years.

ACKNOWLEDGMENTS

A debt of gratitude is owed to the owners of the metal projectile points for allowing them to be documented and the information published. The owners wish to remain anonymous. Thanks go to Tom Hester for help in locating references and his suggestions and comments about the artifacts. The authors are grateful to Carolyn Spock, Director of Records at Texas Archeological Research Laboratory, for assistance in obtaining references. The assistance of Texas Parks and Wildlife Department is greatly appreciated. A thank you goes to the Center for Archaeological Research at the University of Texas at San Antonio for the use of their microscope and electronic scale. The critique and suggestion provided by Toni Figueroa are appreciated.

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A BURIAL FOUND IN THE 1960s AT 41KR71 IN KERR COUNTY, TEXAS

Bryant Saner, Jr.

ABSTRACT

The prehistoric burial of a child was recovered at 41KR71 Kerr County, Texas in the mid-60s. This subsurface interment produced some of the long bones of the arms, ribs, portions of the clavicles, several fragments of cervical vertebrae and remnants of the skull. Some of the remains were lost shortly after they were recovered. The condition and pathology of the remains are discussed.

INTRODUCTION

In the mid-1960s the burial of a child was recovered in north central Kerr County, Texas at 41KR71. Betty Saner, the mother of Bryant Saner, Jr., discovered the burial that contained the partial skeleton of a child while conducting uncontrolled excavation. Animal bone, debitage, diagnostic dart and arrow points and chert tools were recovered at this site. Mrs. Saner did not recall the exact depth at which the human remains were found, but thought it was about one and one-half to two feet below the surface. If artifacts were associated with the burial or if it was in a burned rock midden is not known. The burial consisted of some rib, long bones, possible scapula and bone fragments of the skull. The bones of the upper body were placed in a paper bag, while the bone of the skull were placed in another bag. While she was away from the area being dug for a short time a cow ate the bag with the bones of the upper body (Betty Saner, personal communication 1997). All that remains today are the bone fragments of the skull.

THE SITE

The site consisted of several burned rock middens and surrounding occupational area in a plowed field. The location is in a fossil flood plain near where a small creek flows into a large creek. Part of the site had been destroyed by road construction. The age of the site ranged from Early Archaic to Late Prehistoric as indicated by the diagnostic artifacts recovered. The Early Archaic, 6000-2500 BC, period was represented by Bell and La Jita dart points. Pedernales and Langtry were the most common dart points from the Middle Archaic period, 2500-1000 BC. Castroville dart points representing the Late Archaic period, 1000-300 BC, were found at the site. The Transitional Archaic, 300 BC-700 AD, was represented by Ensor, Edgewood and Frio dart points. The Late Prehistoric, 700 AD-1600 AD period was represented by Edwards, Scallorn and Perdiz arrow points (Turner and Hester 1999). No cultural material representing historic occupation by Native Americans was seen at 41KR71.

HUMAN OSTEOLOGY

The skeletal inventory shows portions of the cranial vault, base, face, mandible, portions of the first and second cervical vertebrae and the left and right acromial end of the clavicles were present. Deciduous erupted teeth and unerupted crowns of permanent teeth were also present. The deciduous teeth accounted for were the mandibular left and right first and second molars, maxillary right and left first and second molars and the left and right first and second incisors. Permanent teeth were represented by crowns of the mandibular left incisor, canine and first molar. The left medial incisor was the only permanent maxillary crown present (Wilson 1997).

The examination of the teeth indicated the child was between two to four and one-half years of age at the time of death. Age was determined by the stage of tooth eruption and tooth development. The tooth eruption sequence indicated the age of death was between two and four years of age. The developmental stage of the permanent mandibular first molar shows the age of death as two to two and one-half years. The development of the permanent mandibular left canine indicates the age of death between three and one-half to four and one-half years (Wilson 1997).

The gross examination of the bones surface showed minimal to moderate damage. There was some pitting evident on the surface. Parallel striation was caused by abrasion on the inner and outer surface of a few of the skeletal fragments (Wilson 1997). Shortly after the bones were recovered they were washed and cleaned with a brush (Betty Saner, personal communication). Dry and fresh bone fractures were present as indicated by the difference in coloration of the fracture lines. Wilson (1997) states "orange staining was present on most of the teeth, all mandibular fragments, small facial and cranial base fragments, both clavicles and the cervical vertebrae." A friend of Mrs. Saner's was a dentist who had cleaned some of the remains in an ultra sonic bath. The orange stain appear only on remains cleaned in the ultrasonic bath. Some of the cranial bone fragments had been glued together in the late 1960s and some fragments had been coated with a glossy preservative, probably varnish (Betty Saner, personal communication).

There was little damage by insect boring on the inner and outer surfaces of the cranial and facial bones. Root adherence and etching was noted on the inner and outer surface of the cranial vault bones. There was some warping of the bones probably caused by periods of dampness and dryness. The amount of warping was difficult to determine because the bones are small and fragmented (Wilson 1997).

The cause of death was not determined, but one bone pathology was seen. It was called cribra orbitalia and was most often seen with porotic hyperostosis. Porotic hyperostosis is a term used to describe a distinctive type of pitting seen in the cranial vault (Wilson 1997). Cribra orbitalia is described as pits in the orbital plates that are usually about 0.5 mm to about 2.0 mm (Roberts and Manchester 1995). This was commonly caused by iron deficient anemia associated with parasites in the body, iron-poor diet or diet changes involved with weaning. However, porotic hyperostosis was not seen. The left and right orbital roof had cribra orbitalia that was ongoing when the child died (Fig. 1). The disease process in this child was mild (Wilson 1997).

No dental pathology was seen. There were some post-mortem fractures noted on the occlusal surface of the maxillary left first and second incisors and on the right first incisor (Wilson 1997).

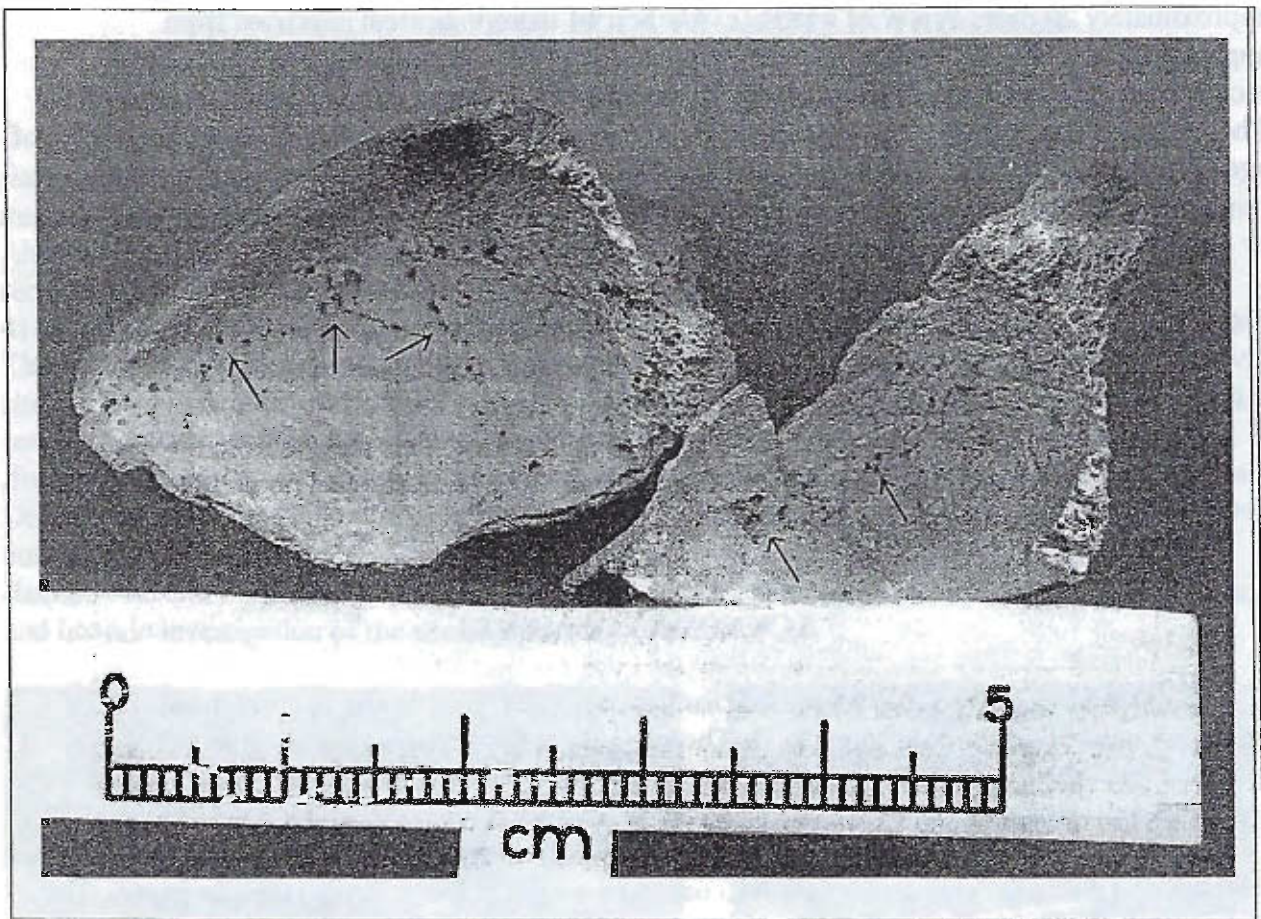


Figure 1 Arrows point to mild cribria orbitalia in the left and right orbital roof.

DISCUSSION

The information about the burial is sketchy at best. The excavation occurred 40 years ago and was not done in a scientific manner. More information is lost since the person that found it has since passed away. If it was found between one and one-half to two feet below the surface it was below the plow zone. An attempt will be made to provide some useful results. The remains were kept in a box for many years, resulting in post-mortem fractures of the bone and dental material. A portion of the remains were cleaned in an ultrasonic bath and others were cleaned with a brush. Some of the remains were coated with varnish. These attempts at cleaning and preservation, albeit done with good intentions, hampered the examination of the remains. The cause of death of the individual from 41KR71 is not known. This is due to the small number of remains post-mortem damage and to a lesser extent improper collection techniques.

Reports of prehistoric human burials in soil in Kerr County are rare. Burials in a sinkhole is reported in the western part of the county. The Bering Sinkhole burial site, 41KR241, is

approximately 20 miles WNW of 41KR71. Carbon 14 dates indicate it was used from approximately 7,500 to 2,000 years before the present. An estimated 62 individuals were recovered. Two were about the same age at the time of death as the individual from 41KR71. The first was between one and two years of age. The second was between three and four years of age and closer to the age of the individual from 41KR71. No pathology was given for these remains. However, pathology of dental material and bone did indicate stress due to malnutrition or disease in some of the individuals at the Bering Sinkhole (Bement 1994).

The sinkhole at 41KR241 was used for burials during most of the time 41KR71 was in use. Artifacts collected indicate 41KR71 was occupied up to 1,500 years after 41KR241. This gives a 7,000 year time span in which the burial could have taken place. The vast majority of the artifacts found were from the Archaic time period.

The remains from 41KR71 showed signs of mild stress. This may be from disease, malnutrition, iron poor diet or diet changes at weaning. The teeth showed no pathology. No definite cause of death could be found for this individual.

ACKNOWLEDGMENTS

Thanks to Betty Saner (deceased) for providing the remains and relating details of the burial. A debt of gratitude is owed to Dr Thomas Hester for arranging the analysis of the skeletal material. At the time of the analysis Dr. Hester was the director of the Texas Archeological Research Laboratory at the University of Texas at Austin. A huge thank you goes to Diane Wilson, formerly at TARL, for doing the analysis of the remains. Thanks to Darrell Creel, present director of TARL, for giving permission to use the material in Diane's report in this paper. The review and suggestions by Jason Weston are appreciated.

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PICTORIAL UPDATE OF HCCA PROJECTS IN PROGRESS

The Hill Country Archeological Association has three ongoing projects. The Kokopelli site is being conducted on a small ranch in Kimble County. The entire ranch is being surveyed, mapped and excavations done where archeological sites are threatened with destruction. The Ahrens Property is an approximately 50 acre tract in Kerr County with three archeological sites recorded to date. A survey of the entire property is planned. There is a burned rock midden, 41KR600, Area-1, BRM-2, being destroyed by erosion. This site is has six test units in progress. The third project is the Kerr Wildlife Management Area survey and mapping of archeological sites. To date over 1600 acres has been surveyed and approximately 450 acres have been mapped resulting in 16 archeological sites being mapped. The data collected will be reported in the *2003 Annual Report to the Texas Historical Commission* submitted by the Texas Parks and Wildlife Department Cultural Resource Program. The Shepard Site, 41KR580, had the field work completed several years ago. No report has been written to date, but one is being planned. Recently several finds in the area have been made that will effect the outcome of the archeological and historic investigation of the site and possibly, the area.

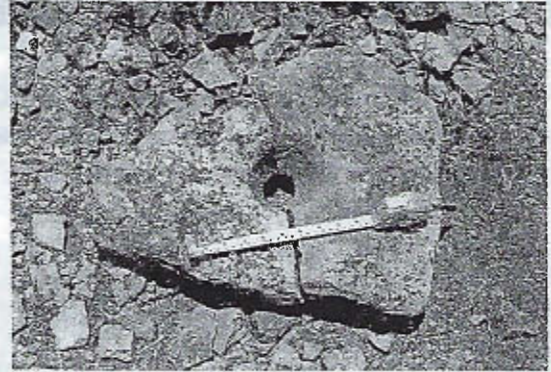
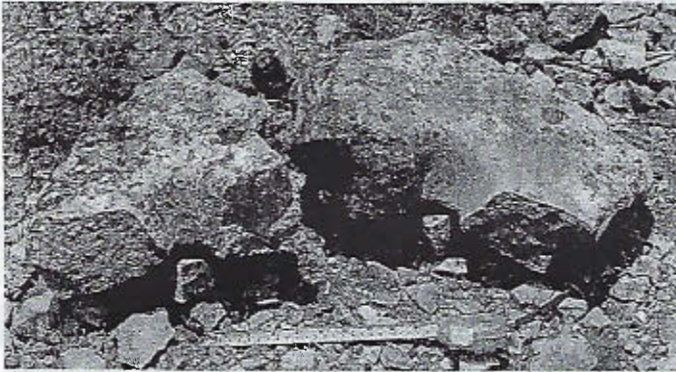


Figure 1. Mortar rock found broken in two pieces ten feet apart at the Kokopelli Project, 41KM217, a burned rock midden..

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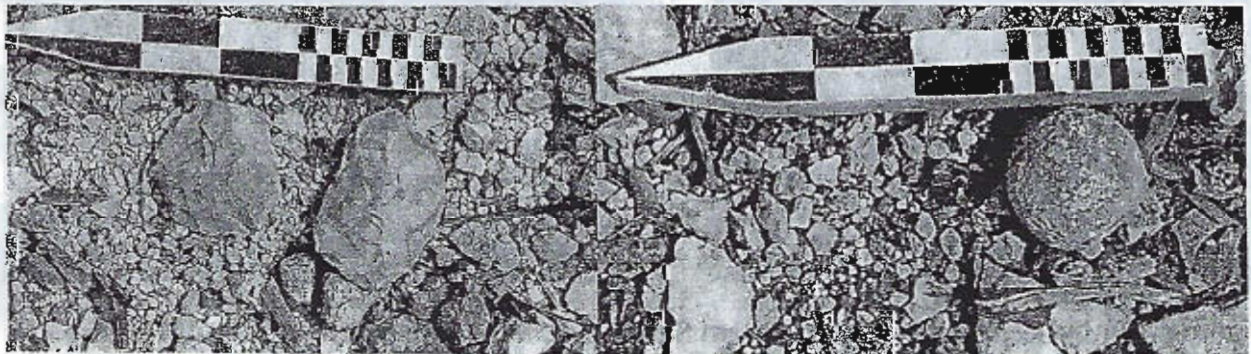


Figure 2. Quarry blank, upper left, and a hammer stone, upper right, from Kokopelli project, 41KM213

PICTORIAL UPDATE OF HCAA PROJECTS IN PROGRESS



Figure 3. Ahrens Property project 41KR600, Area-1, TU-6, Level 2 possible hearth. Fire cracked rock in pile was removed from level above possible hearth, upper left. Bulverde dart point recovered from this unit, upper right.

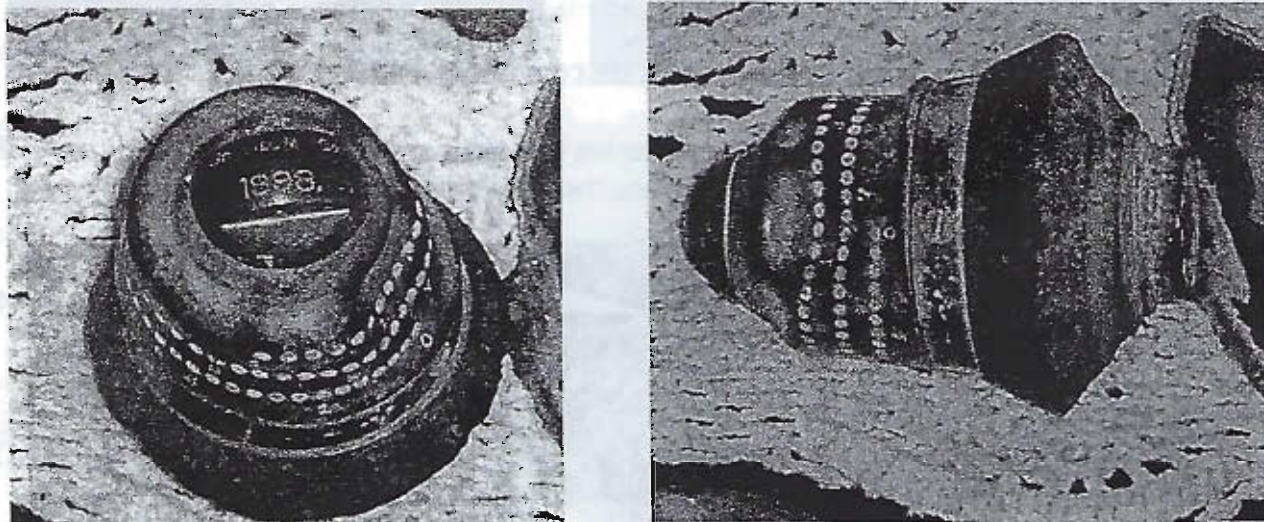


Figure 4. Ordnance found near the Shepard Site, 41KR580. Detonator for shell with "SCOVILL 1898" on top, upper left. Side view of detonator, upper right.

AUTHORS

BRYANT SANER, JR. Grew up in the Kerr County and developed an interest in archeology at an early age. He is active in recording, documenting, teaching and preserving archeology in the Hill Country. Saner has published articles in *La Tierra and The Steward*. He served a four year term as a Steward with the THC Stewards Network and is an active member of the Texas Archeological Society, Southern Texas Archaeological Association and the Hill Country Archeological Association. He is employed by the Center for Archaeological Research at the University of Texas at San Antonio as a field archeologist.

T. G. "WOODY" WOODWARD AND KAY WOODWARD, both avocational, channeled their long-time interest by joining the El Paso Archaeological Society in the 1960's-70's, where they learned proper archeological techniques. Following job-related moves to North Dakota and Louisiana, they retired to the Texas Hill Country. As charter members of HCAA, both continue to hold offices and are active in the organization. They seek opportunities to further their knowledge of archeological techniques and field methods. Both are active members of TAS and STAA, as well as Stewards in the Texas Archeological Stewards Network under the direction of the Texas Historical Commission. They find public outreach programs, particularly those involving children in an outdoor setting, most rewarding. Kay also edits archeological papers and reports, while Woody contributes his skill as an illustrator to archeological publications.

This journal provided by a grant from
the Texas Archeological Society,
for which HCAA is very grateful.



(Hatfield Shelter, 41KR493)

HILL COUNTRY ARCHEOLOGICAL ASSOCIATION MEMBERSHIP APPLICATION

Completion of the membership application and payment of dues indicates the member will not intentionally violate the terms and conditions of any Federal or Texas Antiquities Statutes, as same as now exist, or shall hereafter be amended or enacted, or engage in the practice of buying or selling of artifacts for commercial purposes or engage in the willful destruction or distortion of archeological data or disregard proper archeological field techniques.

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____ Patron-----	\$500.00

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NOTE: This form and wording adapted from the Texas Archeological Society and Southern Texas Archaeological Association forms.

THE HILL COUNTRY ARCHEOLOGICAL ASSOCIATION

The Hill Country Archeological Association (HCAA) is a non-profit organization. Our purpose is to bring people together who have an active interest in the archeology and prehistoric heritage of the Texas Hill Country in an atmosphere conducive to the exchange of information and ideas. Foremost, in our activities, we promote preservation of archeological sites and offer proper archeological field and laboratory techniques training.

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