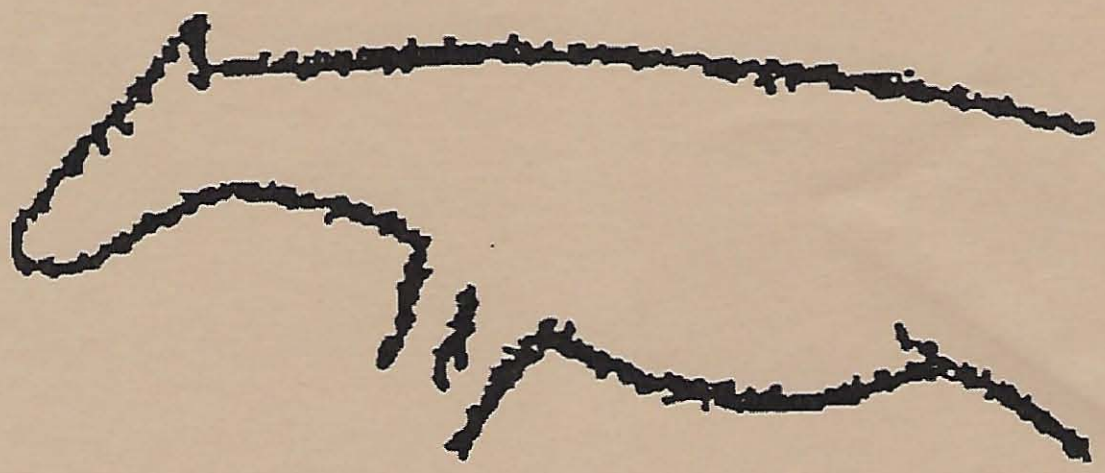
ANCIENT ECHOES



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ANCIENT ECHOES

JOURNAL OF THE HILL COUNTRY ARCHEOLOGICAL ASSOCIATION

2009 VOLUME 5 **Bryant Saner, Jr., Editor**

ABOUT THE COVER: Drawing made from a pictograph at the Hatfield Shelter, 41KR493 by Bobby Rector

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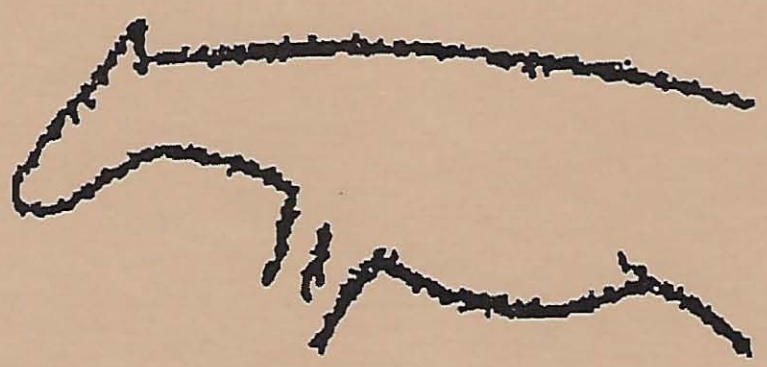

A REMINDER OF THE PAST

E. Thomas Miller

The following is offered to document the recovery of an unusual artifact on November 4, 1976, during a visit to a vandalized prehistoric site within the Kerrville city limits. The site, recorded as 41KR559, is located on a level terrace above a drainage channel terminating at the Guadalupe River near the present Hill Country Youth Exhibition Center.

The writer, and several friends with similar interest, observed the depredations of collectors in past years. The holes indicated they were dug some years ago because the depressions were bowl-like in appearance due to erosion. During a refreshing lunch at the site, I thought it would be interesting to learn whether the excavator had reached the first occupation level, so a hole about 2 M in overall size was selected near the rim of the channel. One wall was troweled to render it vertical, then I removed the former displaced soil on the floor. No apparent occupation lens was visible in the wall. The excavation was continued until I was convinced sterile soil had been reached. While removing the previously excavated soil, I noticed an elongated chert object, (see figure 1). After examination, I could not recall having ever seen a similar artifact described in the archeological publications in my possession. Its length is 12cm, 2.5 to 3cm wide, 0.5 to 1cm thick, and weighs 2oz.

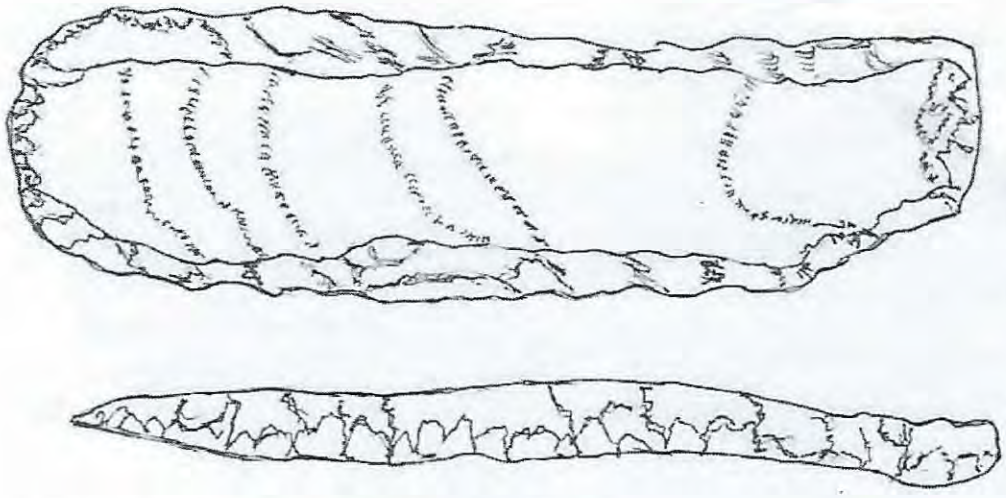

Figure 1: Top and edge view drawing of artifact.

The artifact is made on a parallel-sided blade with little overall longitudinal curvature. Virtually the entire dorsal surface is covered by the scar of the previous blade removal.

The chert is predominately dark gray with subtle mottling, but the dorsal surface is variegated with a linear "seam" of reddish brown running from the platform end most of

the way to the terminal end of the blade. That end also has a wide area of grayish green color. The reddish brown and grayish green colors appear to be most of the outer rind of the parent material. The artifact has no hint of patination (see figures 2, 3 and 4).

Figure 2: Edge View

Aside from the platform end, the entire circumference of the blade has been trimmed. Both sides are steeply angled, like that of a scraper, while the distal (terminal) end is thin and has only minor retouch.


Figure 3: Dorsal view

All in all, the artifact is a striking blade tool made of high quality chert, doubtlessly by a master flintknapper. Technologically, it seems to fit within the Clovis blade technology aptly described by Collins (1999).

Figure 4: Ventral view

Over the intervening years, this anonymous curiosity has been displayed to five prominent archeologists, who will remain nameless, soliciting their expert advice. No unanimous opinion was reached, but the general consensus was that it was Paleo in origin. I do not remember seeing similar chert as represented. It does not appear that it was subjected for any lengthy period to its intended use as it has sharp edges and no use wear is obvious to the naked eye.

At the general meeting of the Hill Country Archeological Association in September, 2008, Dr. Charles Frederick, UT-Austin, presented a talk on Edwards Plateau chert. At the conclusion of his discussion, I approached him and presented this artifact. I took it to the meeting with the idea that he could provide additional information on this prehistoric artifact. He stated it was Edwards chert and to prove his belief, we went to a darkened storage room at the Riverside Nature Center with a black light he had brought along to the meeting. The result confirmed his initial opinion. No further speculation regarding the character or age of the artifact was offered.

The age of the site where this artifact was found is questionable as no other dateable artifacts were found. No effort was made to determine size. It was never learned who the culprits were that scavenged the site or to be able to witness the result of their efforts. No great amount of burned rock was present to indicate the existence of a midden. Apparently due to the lack of occupational evidence, the site experienced limited visits by prehistoric people, which indicates to me why there was no widespread looting by the invaders looking for the desired collectible material. There remains the possibility this artifact was found, prized and retained by an unknown human traveler to this area adding another unanswered question to the mystery of the past.

It is my intention to present this curious artifact to Dr. Steve Black for curation at Texas State University, San Marcos, Texas.

To the named and nameless archeologists who viewed the artifact and offered their opinions, my respectful gratitude. Sincere appreciation goes to my good friend, Dr. Steve Black, for his encouraging words when I considered writing this report and his suggestions of the artifact's description. A special debt of thanks to Terry Farley for her photographs of the artifact. Further, I am grateful to her and Kay Woodward for getting this report into publication.

Collins, M. B.
1999 Clovis Blade Technology. University of Texas Press, Austin, Texas.

OH DANG!! I didn't know it was loaded.
Artist Bryant Saner, Jr.

ARCHEOLOGICAL SURVEY OF CAPITAL INVESTMENT 100 ACRES IN SOUTHERN KERR COUNTY, TEXAS

Bryant Saner, Jr.

ABSTRACT

This archeological investigation contains sites located in a valley and on upland edges. A total of six burned rock middens and a lithic workshop are found on four sites in the valley. On the upland edge two quarry sites are found. Three of the valley sites were recorded in 1983. One valley site and two upland edge sites were recorded in 1996 and 1997. The middens are on the Glen Rose Limestone, which is not chert bearing. The quarry sites are on the Edwards Limestone which is chert bearing. The relationship of the midden, quarries and workshop areas to one another is discussed.

INTRODUCTION

In 1996 & 1997, an archeological survey was conducted on approximately 100 acres of land located in southern Kerr County, Texas (Fig. 1). The owner of the land had purchased it as an investment. The tract was cleared of brush and an earthen dam built. The land was sold in September of 1997, prior to completion of the survey. An area of the upland and upland edge were not surveyed. The new owner would not allow the archeological survey to continue.

Approximately two-thirds of the tract was surveyed. Middens, lithic workshop and flint quarry/procurement areas were found and recorded. A pedestrian surface survey, one test unit and surface collection of the middens were completed. The land was also used as a field experience for an "Archeology for Gifted and Talented Kids" class conducted by the author through the Kerrville Independent School District.

Despite not completing the survey several important goals were accomplished. Archeological information was gathered showing the relationship of a flint procurement area to the other sites found on the 100 acres. Data on the archeological sites was collected and will be discussed in this report. The sites were used to educate young people about recording and preserving prehistoric archeological sites. The group of gifted and talented kids were exposed to archeology, helped record 41KR558 and had a great learning experience.

ENVIRONMENTAL BACKGROUND

The 100 acre tract of land is located in southern Kerr County, Texas which is part of the southern Edwards Plateau. The elevation range for the survey area is 1780 ft to 2020 ft AMSL (USGS 1982). The Edwards Plateau consists mainly of Lower Cretaceous limestone, which contains an abundance of fossils (Matthews 1984). During the Cretaceous period, shallow seas advanced and retreated over this area of Texas depositing calcium bearing shelled organisms on the sea floor creating thick layers of limestone. Silica was deposited in the Edwards limestone during the Cretaceous period

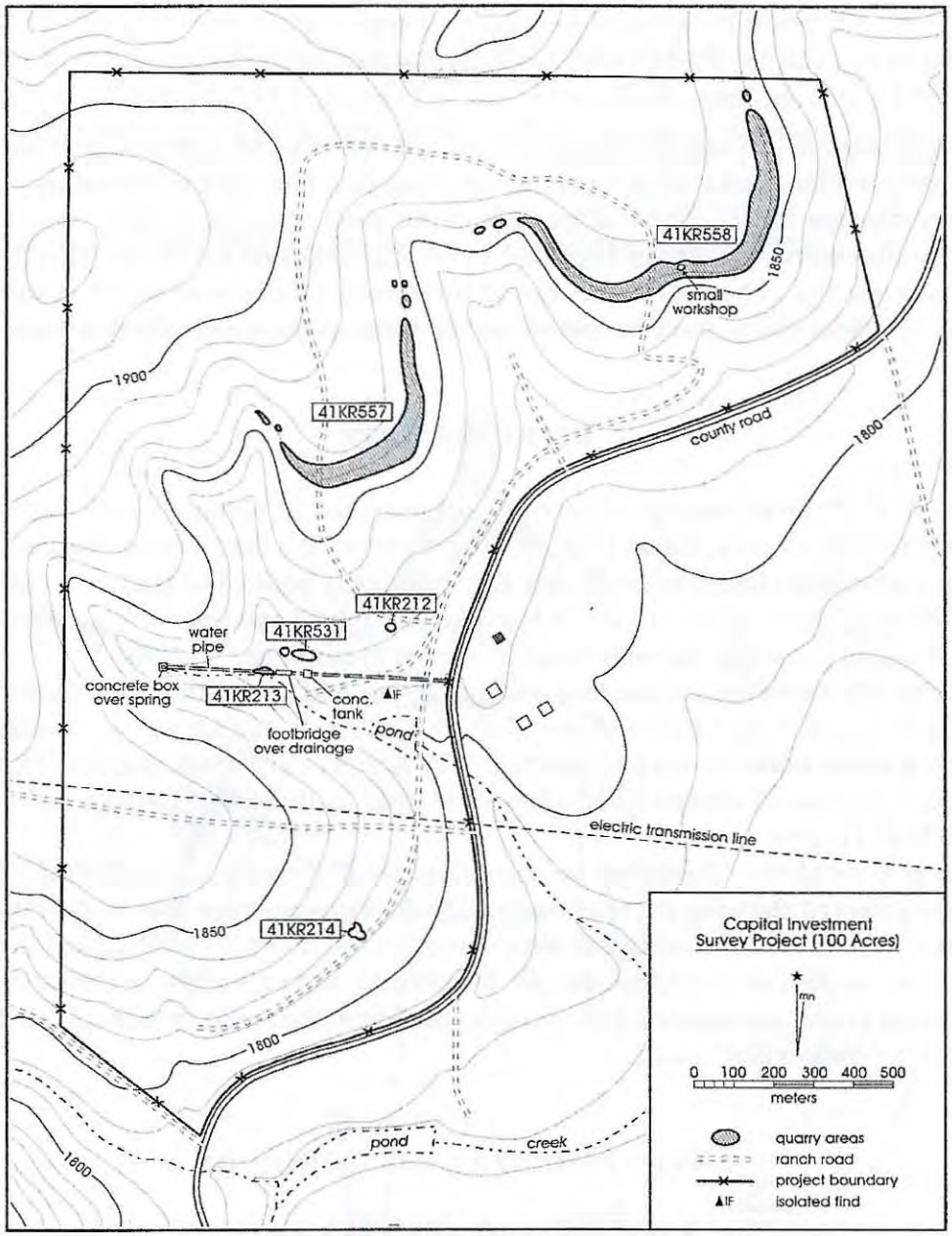

Figure 1. *Survey map of the Capital Investment 100 acre tract.*

which became chert. It is believed that during the Miocene time period 10 to 20 million years ago the Edwards Plateau was elevated approximately 2000 feet creating the Balcones (Spanish for balcony) Fault Line. This fault line runs from near Waco to Austin to San Antonio. It then turns west and runs toward Del Rio. Others believe the lifting occurred much earlier and the southeast side of the Balcones Fault dropped during the Miocene. (Spearing 1991).

The hills and valleys in southern Kerr County are the result of heavy erosion over millions of years from rain water runoff, rivers and streams. This eroded the Edwards limestone exposing the chert. The Glen rose limestone was exposed also (USGS 1982). The upper elevations of the survey tract are Edwards limestone, Fort Terrett Member, while the valleys are Glen Rose limestone (Barnes 1983). The Fort Terrett Member is one of three main chert-bearing units in Edwards limestone. The others are the Segovia Member and Devil's River Formations. Edwards limestone chert is of good quality and was highly sought after by prehistoric inhabitants to make the tools needed for survival (Banks 1990).

According to Dittemore & Coburn (1986), the soil found in the survey area is Eckrant-Comfort Association, Eckrant-Rock Outcrop Association and Kerrville-Real Association. The Eckrant-Comfort association consists of shallow, cobbly and stoney soils. The Eckrant soil is generally near the edge of hilltops and is a dark gray, mildly alkaline, cobbly clay on the surface changing to a dark grayish brown calcareous clay at approximately 10 to 12 centimeter below the surface. The Comfort soil is a dark reddish brown stony clay at the surface to an approximate depth of 30 to 35 centimeters. Both of these types of soils set on limestone bedrock. The Eckrant-Rock outcrop association made up of very shallow, cobbly and stony clayey soils on sides of long, narrow limestone hills. The Rock outcrop can be as high as 16 to 18 centimeters, range from 3 meters to 6 meters thick and are covered with as much as 8 centimeters of soil. The Kerrville-Real Association consist of moderately deep and shallow, gravelly and loamy soils. Kerrville soil is pale brown gravelly clay loam with few bodies of calcium carbonate on the surface. Below the surface this soil is very pale brown clay loam with soft bodies and concretions of calcium carbonate. The Kerrville soil can be as deep as 65 centimeters. The Real soil is very dark gray, very gravelly clay loam to an approximate depth of 10 centimeters. It changes to very dark grayish brown, extremely gravelly clay loam with limestone pebbles and a few cobbles and stones. The subsurface layer of Real soil can reach depth of 45 centimeters and lies on weakly cemented limestone and marl.

The Cretaceous limestone found in the Hill Country is fractured and porous. Rain water filters through the rock and deep into the ground. The many valleys and canyons found in Kerr County cut across some of the cracks creating springs (Brune 1975). One of these springs can be found in a small canyon on the survey tract. It has a cement box collecting water as it empties from the rock. A pipe takes the water out of the box to a small rock and mortar storage tank approximately 300 feet downstream. The water is piped to a house approximately 400 feet from the storage tank. The water from the spring was the only water supply for the household. The water that overflows from the box travels down the bedrock canyon floor to a small lake created by an earthen dam approximately 600 feet down stream from the spring. The water impounded by the dam covers about one-half acre.

The survey area drains southeast into a large creek that is approximately 700 meters from the earthen dam. The large creek is part of the Turtle Creek water shed. The headwaters of Turtle Creek are 2.5 miles west of the survey area and flow eastward. Turtle creek empties into the Guadalupe River 9.5 miles east of the survey area. The Guadalupe River is the major drainage system for Kerr

County. The river begins in two areas of the county. The North Fork of the Guadalupe River starts in western Kerr County, while the South Fork starts in the southwest part of the county. The two forks come together near Hunt to form the Guadalupe River proper. It flows east through the center of the county, exiting at the east boundary near Comfort. A small portion of the northwest corner of the county is part of the Llano river drainage system. The extreme northeast corner of the county drain into the Pedernales River drainage system. A small portion on south Kerr County is in the Medina River Drainage system. The northern edge of this system is 2.8 miles southwest of the survey area.

PREHISTORIC BACKGROUND

Humans have occupied the western hemisphere for 13,500 years and may have arrived here as early as 33,000 years ago (Gore 1997). Kerr County has been inhabited for at least 11,000 years (Turner & Hester 1993). This is indicated by two documented Clovis dart point finds in the county Priour 1985; Saner 1995). Occasionally traces of evidence are recovered hinting at human occupation of the Edwards Plateau prior to 11,000 years BP (before present), however strong and convincing proof is still lacking (Collins 1995).

The time frame from 11,000 to about 8,800/8,500 years BP is called the Paleoindians period (Turner & Hester 1999). It is highlighted by the hunting of large extinct animals such as; mammoth, mastodon and bison antiquus. Clovis people manufactured prismatic blades. The bison antiquus became extinct later than the mammoth and mastodon. People using the Folsom dart point relied more on the bison than earlier Clovis people did. Foraging and gathering of plant foods and hunting of small animals were also important to supplement their diet. The lanceolate fluted Clovis and Folsom dart points are common in Early Paleoindian times. The non-fluted lanceolate Plainview dart point is found in the Late Paleoindain period, but may also be found with earlier Folsom dart points. In the Late Paleoindian period non-fluted lanceolate dart points such as, Barber and Golindrina are common. (Collins 1995).

The Early Archaic Period lasted from approximately 8,800/8,500 to 4,500 years BP, More or less (Prewitt 1981, Turner & Hester 1999). It is characterized by a shift in climate from mesic to extremely xeric conditions with a short, 500 to 800 years, decrease in the dry conditions (Collins 1995). Prewitt (1981), notes that plant food gathering and small to medium game hunting became more important during this time period. Collins (1995), indicates acorns, other nuts, berries, bulbs and grass seeds, as well as, deer and turkey, took new significance in the Early Archaic diet. He also surmises that modern bison and antelope were scarce or nonexistant during this period. Starting early on, stone-lined basin and flat hearths for cooking are seen with burned-rock middens appearing late in the period. Dart point styles with straight and notched stems arrive on the scene. Some of these dart points are: Gower, Wells, Bell, Andice, Martindale and Uvalde (Prewitt 1981). Clear Fork and Guadalupe bifaces are seen during the Early Archaic (Collins 1995).

The Middle Archaic lasted about 2,500 years from 4,500 to 3,000 years BP as related by Turner & Hester (1999). Prewitt (1981) describes this period ending about 2,250 years BP. The climate during those years started as very dry shifting to wetter, cooler conditions (Collins 1995) An increase of the number of sites and lithic artifacts are seen indicating an increase in population. Cemeteries containing many individuals are present late in the period indicating some territorial

tendencies among these people. Trade networks are set up (Turner & Hester 1999). The Loma Sandia prehistoric cemetery located in Live Oak County in south Texas revealed caches of thinned bifaces made of Edwards Chert. One of these caches was associated with a Middle Archaic Tortugas dart point indicating trade with Central Texas during this period (Tayloy & Highley 1995). The number of burned rock middens was growing very fast indicating heavy plant food processing. Hunting continues to be an important food source as indicated by the large number of projectile points seen at Middle Archaic sites. There appears to be a balance between hunting and gathering. Near the end of this period there is a slight shift of importance toward gathering. Nolan and Travis dart points are noted early, with Bulverde found later. Pedernales followed by Marshall, Williams and Lange dart points are seen in the mid to later part of the Middle Archaic (Prewitt 1981)

The Late Archaic is described by Prewitt (1981), as lasting about 1000 years from 2,250 to 1,250 years BP. The mesic climate of the earlier years continues at the beginning of the period. In the waning years of this time frame the climate begins to get warmer and drier (Collins 1995). Processing of food plants continues with an increased emphasis on gathering during this period. Bison are present at the start of the Late Archaic Period but soon disappear. They do not appear to have been a significant food source during their presences (Prewitt 1981). The accumulation of burned rock middens decreased during this period (Johnson 1995). Marcos, Montell and Castroville dart points are noted in the early part of this period. Ensor, Frio and Fairland are found in the middle to late portion and Darl in the late portion of the period (Collins 1995). The dart points in the later part of this period are much smaller than the earlier ones (Johnson 1995).

The Late Prehistoric began about 1,250 years BP. Johnson (1995) refers to this period as the Post-Archaic Era and believes it may have started between 1600 years BP and 800 years BP. This period is divided into early and late sub-periods (Collins 1995). Prewitt (1981) and Turner and Hester (1999) refers to the early sub-period as the Austin Phase and the later sub-period as the Toyah Phase. In the early portion the climate continues to move toward xeric conditions. The atlatl & dart is no longer in vogue. The bow and arrow was in use. Burned rock middens continued in use, especially in the western Edwards Plateau. They accumulated at a very slow rate. Edwards and Scallorn arrow points are common in the early period (Collins 1995). Hunting and gathering continue as in the previous time period. Buffalo return to the region and are once again an important food source, especially in the later part of the period (Turner & Hester 1999). Burials of this time show an increase in individuals with Scallorn arrow points that have a high probability of being the cause of death. This may indicate an increase in warfare between groups of early Late Prehistoric people (Johnson 1995). Most agree this early part of the Late Archaic ended about 700 to 800 years BP. The later phase is characterized by the addition of mostly local pottery called Leon Plain. Some evidence exists that pottery was imported from the Caddo in east Texas. Agriculture also appears during the later stages, but is of little importance in the Edwards Plateau. Perdiz arrow points, large thinned bifaces, end scrappers and prismatic blades are seen during the late part of this period. These items have been associated with bison hunting (Collins 1995).

The starting of the Historic Period in Central Texas is not agreed upon. Collins (1995) believes it began about 250 years BP. Turner and Hester (1999) infer that it started about 400 years BP. Hester (1995) later refers to the early part of this time period as the Protohistoric. This term refers to that time during which the Europeans arrive in the region but have little impact on the native inhabitants. He names the period from about 250 years BP (1750 AD) to the present as the Historic.

The early part of this period, protohistoric, is characterized by the continued use of flint arrow

points and a life style some what consistent with the previous period. Toyah and Fresno are common to the Hill Country (Turner & Hester 1999). Bison remain important at this time. The Europeans arrive to the area in the later part of the Historic Period. The indigenous inhabitants moved toward central Texas. Then Spanish arrived at a time when the Indians are a combination of tribes pushed south by advancing Plains Indians, pushed west by advancing Europeans and pushed north by advancing Spanish in Mexico. Many Native Americans at the time began to obtaine European ceramics, metal, guns and horses. Metal arrow points are used by those unable to acquire guns. The diseases brought by the Europeans were more devastating to the Indians than any weapon the Europeans could imagine. Some Indians went to the Spanish missions (Collins 1995). Indigenous inhabitants of the region were gone by the early part of 19th century Non-indigenous Indian groups continued to raid in the area late into the 19th century (Black & McGraw 1985). The last Indian raid in Kerr County occurred near Mountain Home on October 5, 1878. Four of the Dowdy children were tending a herd of sheep when the Indians attacked. All four were killed (Bennett 1956). The type of Indians participating in the raid is not mentioned

PREVIOUS INVESTIGATION

In 1970, two middens and a terrace site were recorded about 1900 feet east to northeast of 41KR214. It was mentioned that dart points, Perdiz arrow points, knives and bifaces were recovered at one site. Very little additional data is given in the site forms (forms on file at TARL).

Several investigations have taken place in southern Kerr County in the vicinity of the 100 acre tract. In 1972, an article was published about a LatePaleo/Early Archaic site about 1.2 miles southwest of the survey area. Diagnostic dart points found here were Plainview, Golondrina and Angostura. Early Archaic diagnostics were Martindale, Gower, Nolan and Uvalde-like dart points. Several types of Middle Archaic Points were recovered. These were Bulverde and Pedernales. In the early 1970's the limited investigation conducted at 41KR29 was an addition to the data base of Late Paleo and Early Archaic sites in this area (Solberger and Hester 1972).

In 1971-72, The Texas Archeological Society (TAS) held a field school in southern Kerr County. Surveys were conducted along the Turtle Creek water shed (Richmond et al, 1983). Two sites, 41KR316 and 347, approximately 0.6 mile to the northeast were recorded during this survey (forms on file at TARL).

A quarry site, 41KR222, was recorded in 1985 during a survey for a high voltage transmission line. It is located about 1300 ft west-north west of 41KR214. This site is not on the 100 acres investigated in this report (forms on file at TARL). In 1997, it was revisited during a site resurvey project by the Texas Historical Commission (Saner 1997).

METHODOLOGY

Revisits were made to 41KR212, 213 and 214. First time visits were made to 41 KR531, 557 and 558. Transects 30 feet apart were done in the valley portion. On the upland edge the quarry sites are long and narrow. They run along a constant elevation where the chert outcrops are located. The

boundary of the site were located by following the contour of the upland edge. Temporal and functional diagnostic were collected from the surface at each site. These artifacts were placed in bags that corresponded to the site.

One test unit, Test Unit A (TU-A), was placed in the southwest portion of the midden at 41KR212. It was 2 feet x 2 feet and was excavated in 5 inch levels to 9" below the surface. Artifacts from each level were placed in a bag with TU-A and the appropriate provenience written on it. A soil sample was taken from 0-5" level and placed in a bag with the appropriate provenience. All artifacts recovered were inventoried, given catalog numbers, examined, identified and the data recorded.

SITE DESCRIPTIONS

41KR212

This site was visited in 1996. It was a burned rock midden at the base of a steep hill with a ranch road on the north edge. There was about 20-30 % of midden remaining. The west and northeast portion have been removed by a bulldozer and used as road base material. The intact remnants are 25 feet north/south and 26 feet east/west. A 2 feet by 2 feet test unit was placed in the intact portion that revealed about 9 inches of cultural material.

A Scallorn arrow point along with a Uvalde dart point were the only diagnostics recovered from the surface. Non-diagnostic artifacts were bifaces, several arrow point preforms, cores, edge modified flakes, rejuvenation flake, and a quartzite mano fragment recovered from the surface (Table 1). Primary, secondary and tertiary flakes were noted on the surface. No other identifiable features were seen. A revisit to the this site in 1997 showed the site was completely destroyed. The contents were used as base material to build up the existing road. A large pile of brush had been burned on the site.

Excavation: The midden at this site was so disturbed that an accurate depth of the midden was difficult to obtain. The northeast portion was entirely removed and used as road base material. A 2 feet by 2 feet test unit, Test Unit A, was placed in the center of the remaining portion of the midden. It was excavated in two 5 inch levels. Level-1, 0 to 5 inches, had humus material from 0 to 1 inch below the surface. Dark grayish black soil with small to medium burned rocks was seen from 1 to 5 inches below the surface. A soil sample was taken in this level. Ten artifacts were collected in this level. Snails counted, but not collected (Table 1).

Level-2, 5 to 10 inches, had dark grayish black soil to 9 inches below the surface. Small to medium size burned rocks were noted from 5 to 9 inches below the surface. No large burned rocks were seen. Large unburned limestone rock and chalky white rocks in brown soil were encountered from 9 to 10 inches below the surface. This is the bottom of the midden. The excavation was stopped at 10 inches below the surface. No soil sample was taken. These data were collected prior to the 1997 visit.

41KR213

This site is along the northern edge of an unnamed drainage down stream from the spring with a concrete box built over it. There is a steep hill on the north side. The east boundary is a

drainage that empties perpendicular into the unnamed drainage . The east end is about 200 feet from the spring. The site is up to 16 feet north/south x 81 feet east/west. There is a burned rock midden, BRM-1, in the east end approximately 14 feet in diameter. In the west end is a concentration of burned rock and debitage, Feature-1 about 8-12 feet north/south x 24 feet east/west. The portion between the east and west areas has scattered burned rock. It can also be found in the drainage. A trench was dug through the site many years ago to place a pipe that goes from the concrete box to a small rock water storage tank across the drainage about 100 feet from the east edge of the midden. Secondary and tertiary flakes are seen through out the site. A thick and a thin biface, core tool and three cores were recovered (Table 1).

41KR214

This site is located on a gentle slope near the base of a hill. The nearest water is a creek about 700 feet to the south. It consists of three burned rock middens. BRM-1 is 3 feet north/south x 35 feet east/west with a rise of about 1 foot. There is one small hole on the east edge. BRM-2 is 34 feet north/south x 45 feet east/west with about 2 feet of rise. It may have over lapped on the south edge of BRM-3. There is a large hole in the center dug by collectors. A collector's hole can be seen on the northeast edge which may be an extension of the large pit in BRM-3. It appears BRM-3 has been completely destroyed by collectors. The dimensions are not measurable, but they would be similar to BRM-2. There are debitage, bifaces and tools scattered about the area around the three middens. An area just south of BRM-1 has scattered burned rock along with other lithics and is Feature-1. One scraper, thick biface, thin biface, two cores and three edge modified flakes were collected from the surface (Table 1).

41KR531

This site is at the base of a steep hill. The site has a gentle slope to the south. It consists of a deflated midden, BRM-1, with a concentration of lithic tools on the south edge. This was designated as Feature-1. The midden is burned rock on the light hard soil (caliche) and limestone. There is no dark soil that is usually associated with burned rock middens. It is 7-14 feet north/south x 35 feet east/west. There is a concentration of lithic, Feature-1, about 15 feet north/south x 10 feet east/west that laps over onto the area of burned rock. There is a concentration of lithics, Feature-2, about 130 feet southwest of the west end of the burned rock. It is 6 feet in diameter. The site is about 50 feet north/south x 180 feet east/west. It is included in this site. There is scattered debitage through out the remainder of the site.
Artifacts recovered were thick and thin bifaces, cores, core tools, edge modified flakes and hammer stone. A Pedernales dart point was the only diagnostic recovered (Table 1).

41KR557

This site is a long, narrow quarry on the upland edge on Edwards Limestone that contain chert out crops. It is between the elevation range 1900-1920 feet. It varies from 10-60 feet wide and is 950 feet in length. Lenticular cobbles of chert are seen along with tabular cobbles. Tested cobbles, some large primary and secondary flakes are seen, but not collected. Tertiary flakes were noted. Debitage is thick over most of the site. While clearing brush, portions of this site were bulldozed.

41KR558

This site is also a long narrow quarry on the upland edge on Edwards Limestone that contain chert out crops. The site is 1150 feet in length, 10 to 75 feet wide and is between the elevations of 1900-1910 feet. Many nodular and tabular cobbles of flint are seen on the site. A few lenticular cobbles are noted. Some primary cortex flakes are seen. Secondary cortex and tertiary flakes are also noted. There is a 6 feet by 6 feet area near the center of the site that has smaller tertiary flakes than are seen in the other areas of the site. No artifacts were collected This may have been a small workshop area.

ARTIFACTS

A total of 98 artifacts were recovered during this survey (Table 1). Test Unit A at 41KR212 yielded 29 artifacts. The surface survey produced 69 artifacts, one of which was an Isolated Find. The soil sample collected at 41KR212, Test Unit A, Level-1 is not included in this count. Four diagnostic artifacts were collected across the site. Thin and thick bifaces, arrow point reforms, rejuvenation flake, quartzite mano fragment, edge modified, cores, core tools and a hammer stone were recovered during the surface survey. Debitage was seen on the surface, but not collected. Debitage and burned chert were collected from Test Unit A. Rabdotus snails were counted, but not collected from the unit.

Diagnostic Dart Points

Martindale: This was a surface Isolated Find. It was found about 275 feet southwest of 41KR531. There is heavy patina on both surfaces. There are several recent breaks, one on lateral corner of the base of the stem, one shoulder in missing and the other has damage. The distal one third of the blade is missing. There may some recent minor damage to the edges. This dart point is found during the Early Archaic period (Turner and Hester 1999). The dimensions are: length 34 mm, width 32 mm, 7 mm, stem length 11 mm, stem width at blade 16 mm, stem width at base 17 mm and stem thickness 5 mm.

Uvalde: This was a surface recovery from 41KR212. There is heavy patination on both surfaces One side of the distal stem, one shoulder and several chips on the lateral edges of the blade are recent. The other shoulder and the distal one fourth of the blade are missing. One lateral edge at the broken end is a burin flake scar. These are old breaks. Several lateral flakes distal one half is gone due to an old break. The time period for this point is Early Archaic (Turner and Hester 1999). The dimensions are 45 mm, width 24 mm, thickness 6 mm, stem length 15 mm, stem width at the blade 14 mm, stem width at base 16 mm and depth of base5 mm.

Pedernales: This was a surface recovery at 41KR531. The shoulders are missing along with the distal one fourth of the stem. The time period for this point is Middle Archaic (Turner and Hester 1999). The dimensions are: length 37 mm, width 35 mm, thickness 6 mm, stem length 15 mm, stem width at the blade 27 mm, stem width at base 26 mm, stem thickness 5 mm and depth of base 7 mm.

Table 1. Artifact Recovery by Provenience

SITES	41KR212	Unit A	41KR213	41KR214	41KR531	Isolated find	**Total**
ARTIFACTS							
					6		19
Biface thin	11		1	1	4		11
Biface thick	4	Lv.1 1	1	1			
Arrow point	2						2
preform	1						1
Rejuvenation	1						1
flake	2						10
Mano Frag.	4						16
quartzite	1		3		5		4
Edge modified			1	3	7		1
Core				2	2		
Core tool				1		1	1
Scraper	1				1		
Pedernales dart point							1
Uvalde dart point	1						1
Martindale dart point						1	1
Scallorn	28						1
arrow point					1		6
Hammer stone		Lv.1 6	6				7
Debitage		Lv.2 7					4
Snails		Lv.1 4					6
Rabdotus		Lv.2 6		8	26		3
Burned chert		Lv.1 3					2
Total		Lv.2 2					98
		29					

Arrow Point

Scallorn: This was a surface recovery at 41KR212. Unfortunately, the artifact was not with the artifacts and was not located for this report. An outline sketch was in the field notes. This will be used for the description. The tip, one shoulder and the lateral edge of the base of the stem are missing. The missing portion of the base is on the same side as the missing shoulder.
The arrow point was used during the Austin phase of the Prehistoric time period from about 700

AD to about 1200 AD (Turner and Hester 1999). The dimensions are: length 21 mm, width 17 mm, thickness 2 mm, stem length 6 mm, stem width at blade 5 mm and stem at base 9 mm.

Figure 2. Dart points; left Martidale, left center Uvalde, right center Pedernales and Arrow point, right Scallorn illustration.

SUMMARY

The area surveyed was about 100 acres. A total of six sites were found, four with middens and two quarry sites. Three of these were found and recorded during the survey. The other three were recorded in 1983. Three sites, 41KR212, 213 and 531 were 300-400 ft. from one of the quarry sites, 41KR557. 41KR214 is about 1200 feet from the quarry and about 450 ft from a creek to the southwest. The chert used to make many of the artifacts collected is of good quality and compared favorably with the chert seen at both quarry sites. The closeness of the quarry to the three sites and the spring may indicate this was a good place to occupy.

Two possible workshop areas associated with 41KR531 and 41KR558 were noted during the survey. An area about 6 feet in diameter of small debitage 120 feet southwest of the midden at 41KR531 was seen. It was smaller than that seen on the remainder of the site. The Pedernales dart point fragment was recovered in this area. A similar area was seen at 41KR558. The vast majority of the debitage found at quarry sites are large primary and secondary cortex flakes. The debitage in this area was smaller, tertiary flakes about 1-2 inches in length.

The workshop area at 41KR531 is associated with and included within the site boundary. It is on what would be considered the occupational area. Raw material may have been obtained at the

nearby quarry and brought to this site. The hammer stone, thin and thick bifaces, cores and types of debitage would suggest that most of the phases of chert manufacture and rework was taking place at this workshop. The edge modified flakes, core tools, scraper and other tools indicate different tasks being done here. Similar task would have been conducted at the other sites.

The quarry, midden and workshops are typical sites found in the Hill Country of Texas. The association of these site to one another is important to the study of settlement and land use patterns. There appears to be an relationship between the quarry sites and the middens. This may have been one reason the early inhabitants of the area chose to camp at this particular location. More data collection and study is needed for comparison to have a more definitive answer.

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"I have no idea what this is, but in few thousand years it will drive archeologist bonkers".
Artist Bryant Saner, Jr.

PEDERNALES DART POINT STEM MANUFACTURE FAILURE FROM KERR COUNTY, TEXAS

Bryant Saner, Jr.

INTRODUCTION

The most common dart point found in the Texas Hill Country is the Pedernales dart point. It was made during the Middle Archaic time period or about 2500 BC to 1200 BC. The dimensions and shape of this point vary widely. The stem base is bifurcated and generally has a thin flute-like flake from the base of the stem to the blade. Sometimes it can extend on to the blade (Turner and Hester 1999). The blade can vary from long and slender triangular to a triangle that is equal on all sides. These points have shoulders that can be narrow and rounded to long and sharp. They are sometimes reworked to a short, stubby triangular point.

ARTIFACT DESCRIPTION

The stem formation on Pedernales dart points starts about mid-way through the manufacturing process and does not have the bifurcation of the finished point (Turner and Hester 1999). The characteristic that stands out is the thinning flake, or flute, on the stem. It is removed in the early to mid-stem formation. The stem is finished before the blade. It can be parallel, slightly contracting or slightly expanding (Richard B Mahoney et al 2003). Most points have the thinning flake on one side of the stem and sometimes on both sides.

To find a break of the stem or proximal blade resulting from a thinning flake overshot is unusual. An overshot flake happens when the shock wave created by a billet hitting the platform turns down into the body of the point. This caused a break of the stem or proximal blade perpendicular to the flat surface. This will leave a telltale flake scar. It goes to the edge of the break and into the body.

A Pedernales dart point from Kerr County, Texas with a stem thinning flake failure is discussed here. The proximal end of the stem is slightly concave and brown in color. There is a small bit of cortex on one corner of the stem. The lateral edges expand on one side and has various widths on the other. The stem changes to gray brown from near the proximal end and into the blade. There is cortex seen on both surfaces of the stem. It appears to be the same cortex and goes through the stem. The shoulders are small with one being slightly more pronouced than the other. Both shoulders are square. One side is wider than the other. The thinning flake was most likely made with a hammer stone. A negative bulb of percussion can be seen at the base of the stem. The thinning flake scar narrows as it approaches the break. At the break the scar narrows more and a small ripple goes across the flake scar. It then turns down into the body of the blade and to the opposite surface. The break is at about an 85 degree angle from the surface of the blade. Ripples show the shock wave spread outward from where the thinning flake scar turns into the body (Fig. 1). The characteristics of this failure are very similar to a Clovis second flute failure from Real County, Texas described in Volume 32, Number 4 of *La Tierra*, (Saner 2005).

Another similar Clovis flute failure was recovered at the Kincaid Shelter in Uvalde County, Texas described on Texas Beyond History (2005).

The dimensions of the Pedernales point are, max. length 46.4 mm, max. width 44.3 mm, max. thickness 11.0 mm, stem length 28.8 mm, stem width at blade 31.2 mm, stem width 5 mm from base 27.2, stem thickness at blade 8.7, stem thickness 5 mm from base 5.2 mm, depth of thinning flake at blade 0.4 mm, depth of thinning flake 5 mm from base 1.1 mm and depth of stem base concavity 1.5 mm.

DISCUSSION

The Pedernales dart point was used during the Middle Archaic time period from about 2500 BC to 1000 BC. They are the most common dart point found in the Texas Hill Country. The stem of this point was started early in the manufacture process and was finished prior to the completion of the blade. The characteristic of this point that stands out is the stem thinning flake scar. It is seen on one or both sides of just about all these dart points.

It very rare to see a Pedernales stem thinning flake failure. The point from Kerr County indicates this flake was removed early in the stem manufacture. The deep negative bulb of percussion seems to show the flake was removed with a hammer stone. This may be a preference on the part of the manufacturer. A punch and a soft billet can remove a similar type of flake. Clovis points are about 7,000 years older than the dart point described here. The comparison of the Clovis fluting failures and this stem thinning flake failure is to show the same or very similar techniques were used in removing them. The mechanism of failure in these isthesame, an overshot flake.

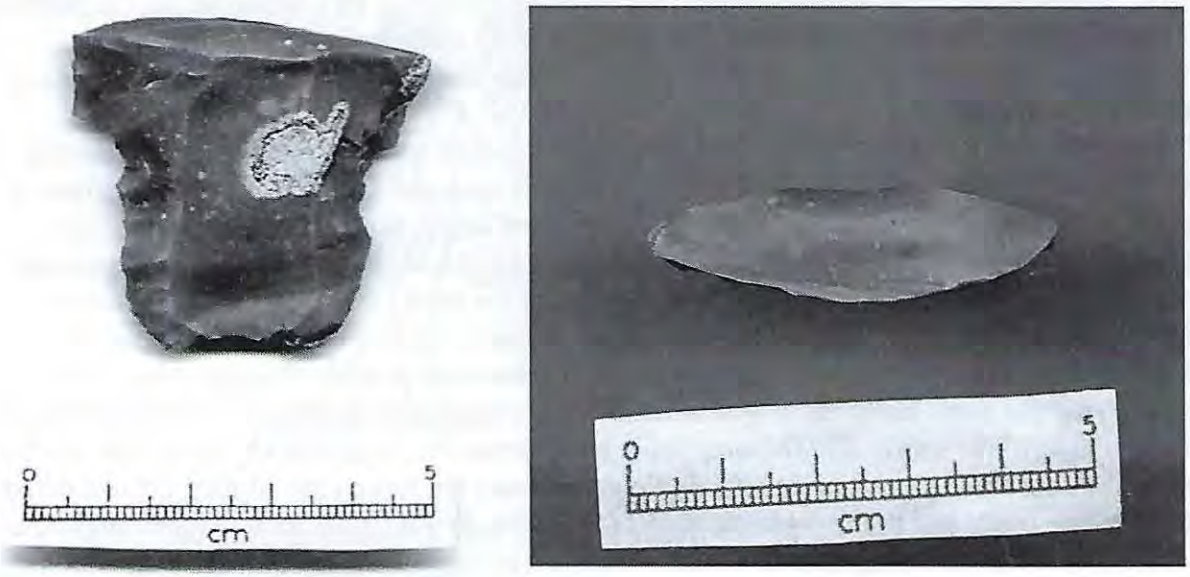

Figure 1. Stem with thinning flakes scar (left). Cross-section of break with ripple.

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HCAA 2009 Texas Archeological Awareness Month Celebration Review
Stephanie Ertel And Bryant Saner, Jr.

Rendezvous by the River" is the name the Hill Country Archeological Association uses for its annual celebration of Texas Archeology Awareness Month. The 2009 Rendezvous was held on October 10th at the Riverside Nature Center in Kerrville. There were 222 guest registered as they entered. Some visitors by passed the registration table and were not officially counted. The estimated number of visitors this year is about 400 people.

Two Exceptional Speakers headlined the event. Many guests came to hear Dr. Thomas Hester's talk on "Adventures in Archeology" and purchased autographed copies of Ellen Sue Turner's and his book *A Field Guide to the Stone Artifacts of Texas Indians.* Dr. Charles Frederick attracted an informed audience to his technical presentation on Edwards Chert.

The Native American drummers and chanters was well attended, Fig. 1. Demonstrations of atlatl , bow and arrow and flintknapping were enjoyed by all. Local history teacher, Clifton Fifer embodied a Mescalero Apache with stories and displays. He was accompanied by Richard Batley portraying a uniformed soldier of the era, Fig. 2.

One interesting new feature this year was a live buffalo with an informative handler, Fig. 3. A simulated hearth site with burned rock that informed visitors about methods used by

Fig. 1 Native American drummers and chanters.

Figure 2. Richard Batley, soldier, and Clifton Fifer, Apache, visit with guest.

the Indians to cook, Fig. 4. Kids painted shaman images in red, black, white and yellow on a canvas. This was well attended. Popular returning activities included a mock dig for children, making paint from ochre to painting rocks and coloring feather headbands. Displays of beads, basketry, musical instruments and toys were fascinated the visitors. Experts offered artifact identification and encouraged landowners to have HCAA survey possible archeological sites. Information was available concerning HCAA, Texas Archeological Society and the Texas Historical Commission.

Outreach raised awareness of the Hill Country's significant archeological heritage and resources. Four thousand fliers were distributed, mostly through schools in Kerr and surrounding counties. Displays at the Kerrville public Library and at Schreiner University's Logan Library reached thousand s of people. Newspaper coverage began in July and included many different stories about the event. Radio interviews reached AM and FM listeners.

Thanks go to the many HCAA members, non-members and participants for all the time and hard work they put into the Rendezvous to make it a huge success.

More Rendezvous photos.

Figure 3. Buffalo at Rendzvous.

Figure 4. Jan Winzinger explains how the Indians used hot rock to cook.

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 prehistory 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 training in archeological field and laboratory methods.

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