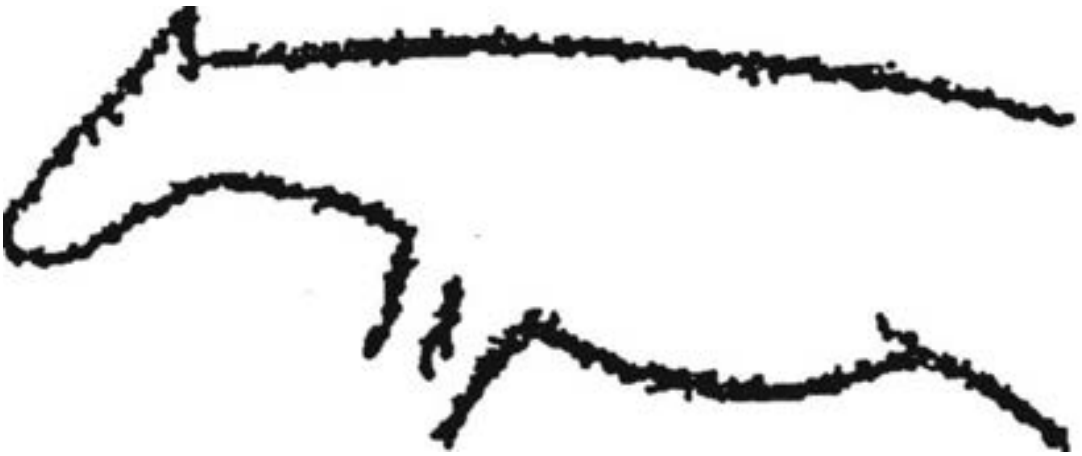
ANCIENT ECHOES



JOURNAL OF THE
HILL COUNTRY
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ANCIENT ECHOES

JOURNAL OF THE HILL COUNTRY ARCHEOLOGICAL ASSOCIATION

2022 VOLUME 9 **John Benedict, Editor**

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

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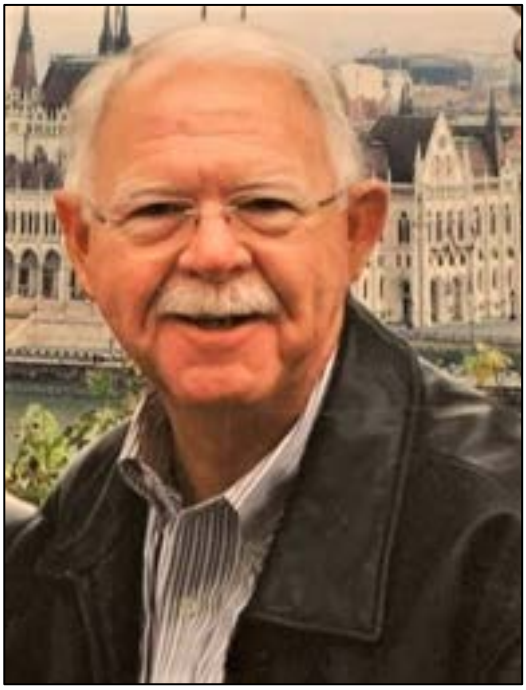
DEDICATION



Steve Stoutamire
1950 - 2022

This volume of Ancient Echoes is dedicated to our dear colleague Steve Stoutamire, who passed away suddenly on November 24, 2022. Steve was born in Quincy, Florida, and received a BA degree in Anthropology from Florida State University and a MS in Geology from Texas Tech University. His lifelong interest in archeology was kindled in boyhood, discovering artifacts on the land around his hometown in the Florida Panhandle.

After a very successful career in the petroleum industry, he retired to his ranch in Kerrville in 2007, where he raised longhorns.

Pursuing his enthusiasm for avocational archeology, he joined the Hill Country Archeological Association (HCAA) in 2007 and assumed leadership roles as President in 2010 and 2011, and Chairman of the Field Work Committee from 2012 to 2021. Steve was also a member of the Texas Archeological Society (TAS), and The Center for the Study of First Americans. He served as the chairman of the board of the Gault School of Archeological Research at UT, Austin. He also served as a Texas Archeology Steward for the Texas Historical Commission.

Most recently, Steve led the effort to bring the annual TAS Field School to Kerr County. These events in the summers of 2021 and 2022 were hugely successful. Each year brought over 350 avocational archeologists to the Kemosabe Site for excavations and lab work, as well as

Texas Archeological Society Field School in 2021 at the Marvin Gohlke Ranch in Kerrville. Planned and carried out by Steve, and members of HCAA and TAS.

multiple surveys of prehistoric, historic, and historic cemetery sites around the county. These were among the largest field schools in TAS history.

Concurrently with his organizing the TAS Field School, Steve developed and was Principal Investigator for HCAA's Crying Woman Ranch Archeology Project. This ongoing research project has produced some of the most important regional data ever recorded, documenting multiple Paleoindian occupations in Kerr County dating to 10,400 years before present. Steve co-authored several excellent articles on the CWR and Kemosabe sites in the *Bulletin of the Texas Archeological Society,* and this and previous volumes of *Ancient Echoes*.

During his tenure with HCAA, Steve taught several formal courses on archeological principles and field work to HCAA members, as well as other educator and avocational groups in the area. He presented numerous educational talks on Kerr County history and archeology to area civic and community groups, and always pursued a keen interest in public education on the heritage, recording, and conservation of Texas history.

Steve (left) with Marvin Gohlke photographing a site feature at CWR. Photo courtesy of Francoise Wilson.

As a leader in field work research, Steve was a wonderful and patient teacher, mentor, and friend to all the field crews. Continually applying and sharing his experience and expertise in field work and geoarcheology, he inspired us with his constant curiosity and encouragement during the hottest or coldest of field days.

We dedicate this volume of Ancient Echoes to Steve for his friendship, encouragement, contributions, and leadership to those of us at HCAA, and the Texas archeological community.

Here Steve is overseeing the excavations at the CWR site west of Kerrville. He is in the background wearing the dark winter coat and grey ball cap.

Texas Ranger Heinrich Joseph Schwethelm: Story, Pictures & Nueces Battle Letter

Phyllis Schwethelm Shelton

While growing up on the Schwethelm Ranch I heard stories from my relatives about my great, great grandfather, Captain Henry Joseph Schwethelm who had been a Texas Ranger and a survivor of the Nueces Massacre. I learned details later too lengthy for this writing (see, Ransleben 1974 p. 89; Watkins 1976 p. 252; van Winkle 2006). In short, he was born in Langst, Prussia (a village outside of Duesselldorf-on-the-Rhine) on September 4, 1840. His parents, Ernst and Sybella, brought him to Texas in 1850 landing at Indianola. They went to New Braunfels where Henry was educated in the English language.

Figure 1. Henry J. Schwethelm in his youth, circa late 1850's.

In 1853 the family moved to a small farm in Martinez. However, a year later his father Ernst left to go to the gold rush in Sacramento, leaving his wife and 14-year-old son to run the farm alone. After Ernst returned in late 1855-56 the farm was sold, and the family moved to Comfort. In the fall of 1857 Henry Schwethelm joined Captain Nelson's ranger force based in San Antonio (Fig. 1). This position paid $35 per month plus horse and provisions. He took part in a fight with Mexican outlaws and mustered out after four months. He next joined John W. Samson's Rangers headquartered in Sisterdale for seven months.

At the time of the Civil War, Ernst Schwethelm was listed as an original member of the Union Loyal League and Henry was also a unionist in sentiment. When conscription into the Confederate Army became an issue, the hill country unionists from Comfort and Fredericksburg met at the head of Turtle Creek and formed a group of men under Major Fritz Tegener to travel to Mexico to join the Union Army. Henry Schwethelm was a member of this group.

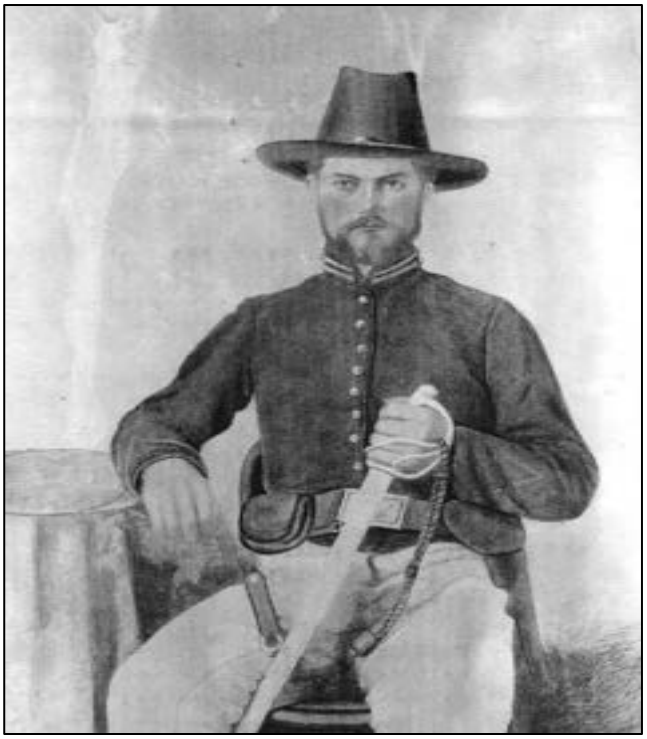


Figure 2. Henry J. Schwethelm in Union Cavalry Uniform, 1st. Texas Co. A. From a pastel drawing, made in New Orleans, LA, 1862.

On August 10, making camp at the Nueces River, the Germans came under fire by Confederate forces of Lieutenant Colin McRae and what is now known as the "Nueces Massacre" occurred. I possess a letter written by Henry Schwethelm to my grandfather, Otto Schwethelm describing the battle and his feelings about it (See following Appendix A for the entire letter). He escaped the battlefield, then went on to Mexico and joined the Union Army at New Orleans (Fig. 2).

After the war, Henry acquired land grants in the Kerrville area including some of the present acres of our ranch. In addition to ranching, he continued with law enforcement. In 1867 Governor E. J. Davis appointed him a Ranger Captain and he raised his own company of 20 volunteers, active until 1877 when they disbanded (Fig. 3). They were based on Johnson Creek, near Ingram. Captain Schwethelm carried a late model .44 cal. 6 shot Colt Dragoon revolver (Fig. 4).

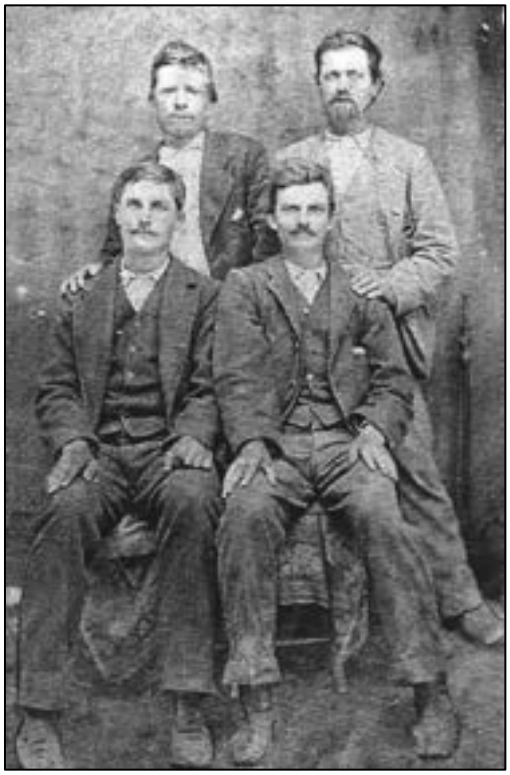


Figure 3. Henry J. Schwethelm (top right), Howard Henderson (top left), Gus Real (seated right), and Ernest Schwethelm who was Henry's son (seated left), circa 1880.

Henry's wife, Emilie Stieler Schwethelm had also come from Prussia as a child with her parents, Gottlieb and Wilhelmina Stieler. Henry and Emilie eloped, rode on horseback through Bandera Pass, and were married at D'Hanis on March 19, 1862. Emilie lost her brother to the Nueces conflict. Although he escaped the battlefield, when he attempted to return home, he was hunted down by the Confederates and strung up in a tree and shot. Her mother and sister had to recover the body under the intimidating observation of Confederate soldiers.

Figure 4. Captain Henry J. Schwethelm's Colt Dragoon revolver. It weighed over 4 pounds and fired six .44 cal lead bullets using paper cartridges loaded with black powder and ignited with percussion caps. Produced by Samuel Colt circa 1851-60.

Figure 5. Panorama of the 50th Wedding Celebration of Captain Henry J. and Emilie Stieler Schwethelm showing all the guests and the old Bruno Schwethelm residence, March 22, 1912.

In 1912 Henry and Emilie celebrated their 50th wedding anniversary on the ranch at the home of their middle son, Bruno. A dance stage was built for the event and there was eating, drinking, and dancing all night. Some photographs I have, record this turn-of-the-century celebration (Figs. 5 and 6).

Figure 6. The 50th Wedding Anniversary Celebration of Henry Schwethelm and Emelie Stieler Schwethelm, March 22, 1912. Seated L to R, Captain Henry Schwethelm, Emelie Schwethelm, standing L to R their sons, Walter, Ernest, and Bruno Schwethelm.

Captain Henry Schwethelm died on August 24, 1924 and is buried in Glen Rest Cemetery, Kerrville. He is credited historically as spearheading the expedition after the war to gather the bones of his comrades and relatives at the Nueces Battle site and taking them to Comfort to be buried at the site now marked with the *"Treue der Union"* Monument honoring their unnecessary deaths (Wikipedia 2022).

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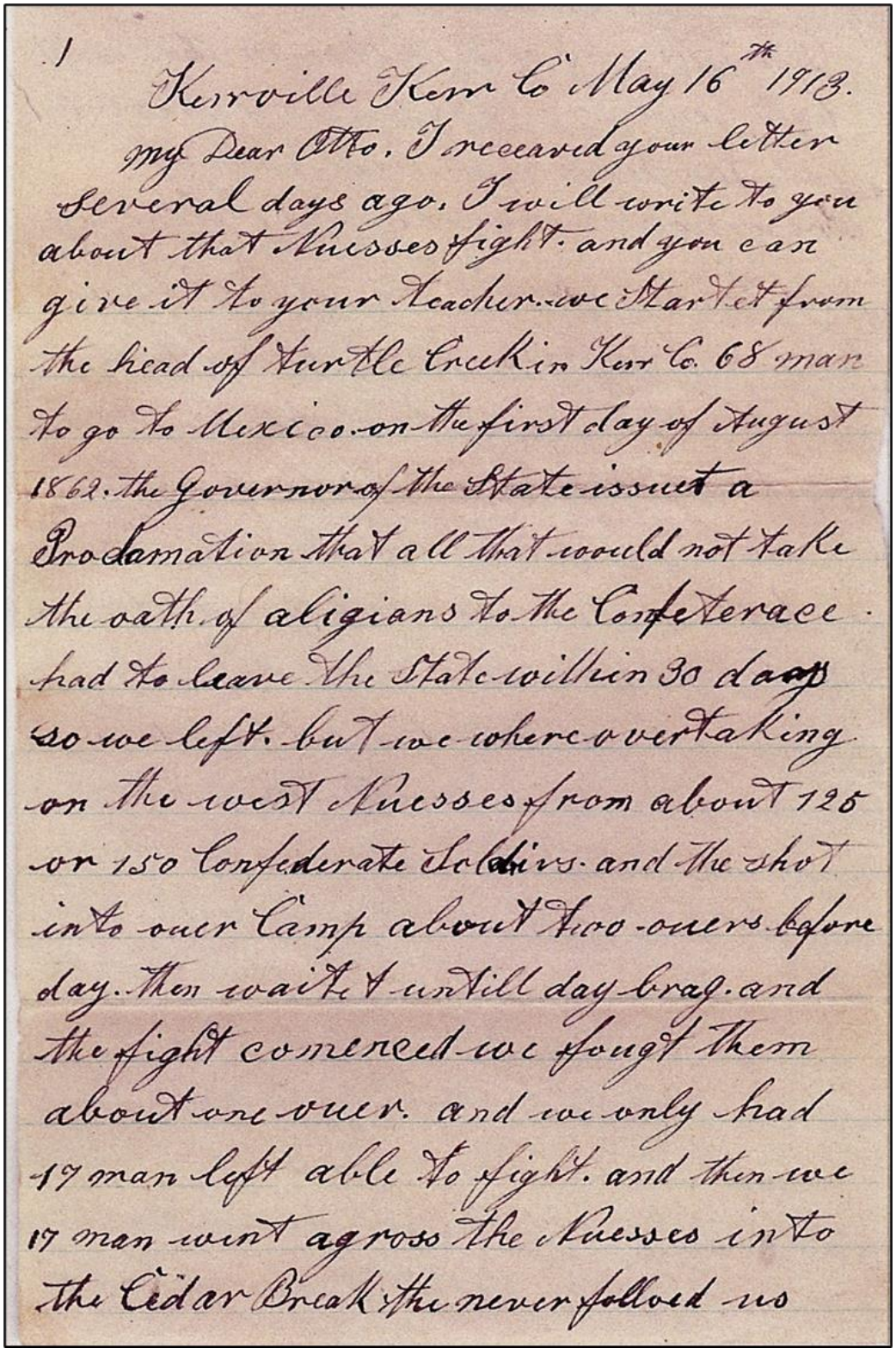
APPENDIX
The Henry J. Schwethelm Letter Detailing the Nueces Battle.
Written May 16, 1913, to his grandson Otto.



1

Kerrville Ker Co May 16th 1913.

my Dear Otto. I receavid your letter several days ago. I will write to you about that Nuesses fight. and you can give it to your Teacher. we Started from the head of Turtle Creek in Ker Co. 68 man to go to Mexico on the first day of August 1862. the Governor of the State issuet a Proclamation that all that would not take the oath of aligians to the Confederace had to leave the State within 30 days so we left. but we where overtaking on the west Nuesses from about 120 or 150 Confederate Soldiers. and the shot into ouer Camp about two ouers before day. then waited until day brag. and the fight comenced we fought them about one ouer. and we only had 17 man left able to fight. and then we 17 man went agross the Nuesses into the Cedar Break the never followed us

2 we left 9 or ten dead. and about 12 or
13 wounded. some 25 man or so had
left our Camp before day. when the
fight Comenced me and Ernst Kramer
Counted our man and there was only 40. left
so the was going back home. and then
I told them that I would not go home that
I was going to Mexico. if I had to go alone.
so Jak Kusenberger and Cha Graff from
Fredrigsburg said if I would go the would
go with me. of course we had no horses
and no money. but we went. that was
Sunday morning on the 10 day of August
and we got in to Mexico on the 13. without
anything to eat. but after we got there
we got plenty to eat. then we went to
Pedros Negros. from there to Monterey.
and from there to Matamores. and from
there was sent to New Orleans by the U S.
Council. Pierce them on the 26 day of Oct 1862
we got to New Orleans. and on the 27.
we inlisted in the US Army. we had a

8
very often nothing to eat for two days
in Mexico. now coming bak to the
fight. after the fight Lieut Lilly had
all of our wounded man killed.
he called on Volonteers to kill them. and
he got plenty of them. one of them Voll is
living here in Kerr Co now his name is
Alonzo Rees. he lives at Center Point
he is now a great Church man. I hope
he well go to hell some day. now I got
all of this information from Dr. Downs
after the war. he sent for him to forth
Clark. to attent to there wounded. he
had about 45 of them. Dr Downs had
a ranch about 10 miles from Bandera
at that time and I was well aquainted
with him. that is about all now.
I suppose. your Grandpa
Henry Shurtheldm.

4

Dear Ollo two of them 14 man that went back home two of them Henry Stieler and the Brukish were taking Preseoner in Kerroille by Harley and turned over to som of Capt Davis Comp. and 3 miles above Kerroille on Goad Creek the killed them shoothing market at them and then left them. after the war we went to the Presses and got the bones and buried them in Comfort.

your Grandpa and Grandma
Schweithelm

An English Architect in Kendall County: Alfred Giles (1853-1920)

Myrna Flach Langford[1]

By appearance and reputation, it would seem at first glance anyway, that it was an easy life for architect Alfred Giles (Fig. 1). Should you meet him in late 1800s perhaps on a street in Comfort near the Faltin building or in Boerne near the old Kendall County Courthouse, where he would later oversee its new façade design and expansion, he would seem a privileged gentleman of means and talent. You most certainly would have heard of his reputation for the fine architecture of countless Texas courthouses, military facilities, and San Antonio's King William area mansions, as well as his large homestead, Hillingdon Ranch in Kendall County.

Figure 1. Architect Alfred Giles

An easy life? Discounting of course, the unease of leaving his saddened relatives in England, the heartbreaking experiences of losing three of his children to the ravages of the times, and the office fire destroying his papers. Of course too there was the harrowing stagecoach robbery, the turmoil of legal proceedings against him in El Paso, the frequent trips to building sites with inadequate communication and new workers and materials to oversee…were surely a hassle. Also, there was the unfruitful, wasted time involved with unused drawings of the Alamo cenotaphs and others (See Spring 2020 Echoes, Kendall County Connection to Alamo Plaza - Alfred Giles' Vision for Early Revitalization Efforts, Boerne Public Library). A bit of strife for certain; frustrations that required the persistent tenacity and even nature of this creative man.

Early Life

Alfred Giles was born in 1853 in Lambeth Borough of London on the Thames River within the sound of the church bell of St. Mary-le-Bow, which designates a true Londoner. His father Thomas Giles was a coach harness maker, an esteemed profession in those days, and was

[1] Myrna Langford is married to David K. Langford a descendant of Alfred Giles. They live on the historic Alfred Giles' Hillingdon Ranch in Kendall County (see, Langford, David and Lorie W. Cantu. 2013. *Hillingdon Ranch: Four Seasons, Six Generations*. Texas A&M Press, College Station).

Our visit to Hillingdon, England with our daughter and two grandchildren in 2015 revealed it is now a small village clinging for its survival at the very edge of Heathrow Airport runways. St. John's Church and Red Lion Inn are the few remaining historical buildings, and there's only a remnant left of the homestead The Laurels - a stone fence. The town has a strong heritage group, Hillingdon Family History Society, with monthly speakers and researchers who have generously added to our Giles family information. We presented this interesting group with our book on the Hillingdon Ranch, and they

likely required to be a member of the guild Worshipful Company of Coachmakers and Coach Harness Makers.

Census records vary on places of residence for the Giles family, which is explained by Alfred Giles in his notes. His father and young siblings sometimes lived in the urban Lambeth, possibly for the schooling and business, and sometimes lived in the main homestead in rural Hillingdon Middlesex where his mother stayed as "London climate did not agree with her." Census of 1871 finds the family listing Laurel Lodge in Hillingdon Heath while Alfred's listing is in Lambeth with occupation given as "Articled pupil to an Architect." This was shortly before Giles' voyage to America.

As a child, Alfred Giles overcame a severe case of rheumatic fever requiring of him a supreme patience. Following Proprietary schooling beginning with "old Cathrow" off Kensington Rd, whom he said, "ruled with a whipping cane," he chose to learn a profession by apprenticeship to an architectural firm in London paid for by his father, which was traditional in those days. He added to his schedule night classes at Kings College with an Arts of Construction course.

His Architectural Work

In 1873 Giles, along with a dentist friend, traveled to the United States where he decided to stay and begin an architectural career. His father died in this time frame. Giles' location of Texas was chosen for the hot dry climate which would hopefully help him to regain his ongoing fragile health. In San Antonio he obtained employment with John H. Kampmann, an established contractor in San Antonio. There he learned to work with the area's building materials, especially the limestone from the Hill Country. Shortly after in 1876, he established his own firm and by the late

Figure 2. Edward Steves Home* at 509 King *William Street, San Antonio, was one of Alfred Giles' First Designs in 1876.

1870s, according to biographers[2], he had become San Antonio's leading architect. His was the first generation of architect educated thinkers, as separated from the previous hands-on-builders in American tradition. The buildings he planned were magnificent. Most were built with a Victorian influence, and later in late 1890s with specific round-arched Romanesque Revival, and still later in the early 1900s in Beaux-Arts Classicism. Possibly with his clients in mind, he consistently practiced restraint in his designs and acquired a loyalty among many of San Antonio's pioneer families. His buildings included homes, courthouses and other public buildings in San Antonio, Comfort, Boerne, Fredericksburg and other towns in Texas, as well as in Mexico.

Perhaps one of the first building jobs established his reputation. Giles and Kampmann joined their talents in drawing and constructing the Edward Steves' home at 509 King William St. in San Antonio (Fig. 2). It was described by Mary C. H. George in, Alfred Giles: An English Architect[3] in Texas and Mexico as "the most famous landmark of the Victorian period in San Antonio and the jewel of King William St." The house is presently owned and operated as a house museum by the San Antonio Conservation Society. George states "The quality of a Giles-designed building is derived from his control of every step of construction." The most useful evidence of the extent and scope of his work, which is remarkable in one lifetime, is a list of 135 Texas buildings (Fig. 5) and 23 Mexico buildings with owners and dates in the George book. In comparison, for Frank Lloyd Wright the greatest architect this country has produced, only about 500 of the designs were built of the twice as many designs. Leading one to wonder if there were

Figure 3. Casa de la Cultura de Lampazos de Naranjo, Mexico. Built in 1906.

[2] Wikipedia. 2022. *Alfred Giles*. https://en.wikipedia.org/wiki/Alfred_Giles_(architect)
Meister, Chris. 2007. *The Architectural Legacy of Alfred Giles, Selected Restorations*. Southwestern Historical Quarterly, Vol. 111 no. 1, pp. 105-106.

[3] George (Jutson), Mary Carolyn Hollers. 1972. *Alfred Giles: An English Architect in Texas and Mexico*. San Antonio Conservations Society Series No. 1. Trinity University Press, San Antonio

many more designs that did not leave Giles' drafting table, for example, the two cenotaphs planned for the Alamo.

We have a friend whose family owned two Giles homes in Mexico, one is now the Casa de la Cultura de Lampazos de Naranjo (Fig. 3), neither are included in published lists. Attesting that a correct total number of his designs is not known and according to George, the information on his buildings is a work in progress.

Figure 4. Alfred Giles Company, circa 1910, Alfred Giles (sitting in front) & son, Geoffrey Giles (behind him).

The Alfred Giles Company employed up to six employees, several of them born in England, and also included his trained sons, Geoffrey and Palmer. Giles' career gave him an opportunity to be active in professional organizations (Fig. 4). He was a founder and president of the Texas State Association of Architects. During his tenure in 1908, there are indications he was quite a forward thinker. He urged the necessity of a law licensing the architect profession, he advocated more care in making buildings fireproof (his own offices and files burned in 1892, sadly for archivists), he supported more sidewalks, and he condemned the placing of signs along railroads and highways obstructing the beautiful natural scenery. In 1911 his rendering was published showing how the San Antonio River could be enhanced with rowboats and pedestrians.

Local area buildings designed by Giles

Bandera: Bandera Jail (1881)
Boerne: Kendall County Courthouse Addition (1909-10), Boerne Public School (1910), also Giles, while part of a syndicate owning Boerne's Ye Kendall Inn, in 1914 devised plans never realized for an addition of cottage accommodations for the historic inn.
Center Point: High School (1911)
Comfort: Faltin General Store (1879), Addition to Faltin Store (1907), Ingenhuett General Store (1880), Addition to Ingenhuett Store (1900), Hotel Giles was Ingenhuett-Faust Hotel (1880-81), Addition to Hotel (1894), Ingenhuett Opera Halle (1882), Ingenhuett Saloon (1891), Ingenhuett Residence (1897), Comfort Post Office (1908-10)
Fredericksburg: Gillespie County Courthouse (1881), Bierschwale Residence (1888), Bank of Fredericksburg (1898), Morris Ranch School (1892), Morris Ranch Jockey House (1893)
Kerrville: Schreiner Bank and Store (1882-93), St Charles Hotel (1884) remodeled (1909) (razed 1936), Kerr County Courthouse (1885) (razed 1926), Masonic Building (1890), Schreiner Residence (1895)

Figure 5. San Antonio Light Advertisement – March 25, 1884.

Annie Laura James Giles

While working as architect on the Bandera jail, Alfred Giles met Annie Laura James, who had made it a point to meet the bachelor architect (Fig. 6). She was the daughter of John James, esteemed surveyor of Boerne, Bandera, Castroville and Bexar Co. As one of the first Texas cattle drivers, in 1846 James put together a herd of 1,000 steers and drove them to the California gold fields. Alfred and Laura were married in 1881 in St. Mark's Episcopal Church in San Antonio, and from that time for- ward, were amused to tell people they met in jail. They had eight children,

five living into adulthood. Following their marriage, they and new daughter Amy took a two-month trip to England, Scotland, and France in 1884 taking in an extraordinary number of tourist sites of note. The architectural milestones they saw did not escape their critiques. Most importantly, they visited Alfred's homestead in the town of Hillingdon, England. New wife Laura met many of his relatives and as she writes perhaps tongue in cheek "I have seen the house where Alfred lived when he was a boy, where he went to school and where he used to go to get milk early each morning."

Following the death of his mother, Sophie Giles in 1886, Alfred, Laura, and Amy made a second trip to England, called back to settle the family's estate, and considered living there permanently. However, after a year spent involved with English life, they decided Texas was the place for them. Family lore has the story that Laura thought England seemed for old people. The English relatives were likely disappointed.

Figure 6. Annie Laura James Giles and Alfred Giles, early in their marriage.

<u>Ranch Life</u>

Living on our part of Hillingdon Ranch, you might say we're in touch with the legend of Alfred Giles every single day in one way or another. Alfred Giles was the great grandfather of my husband David, and John James, Giles's father-in-law, was David's great-great grandfather.

This now seven generation ranch, Giles named Hillingdon Ranch in remembrance of the area he considered home in England, was purchased in 1886 by Giles and his brother-in -law John H. James, famous jurist, whose portion of the property was referred to as Flat Rock. Giles purchased the land initially from the railroad for $.50 an acre, and as additional parcels became available he

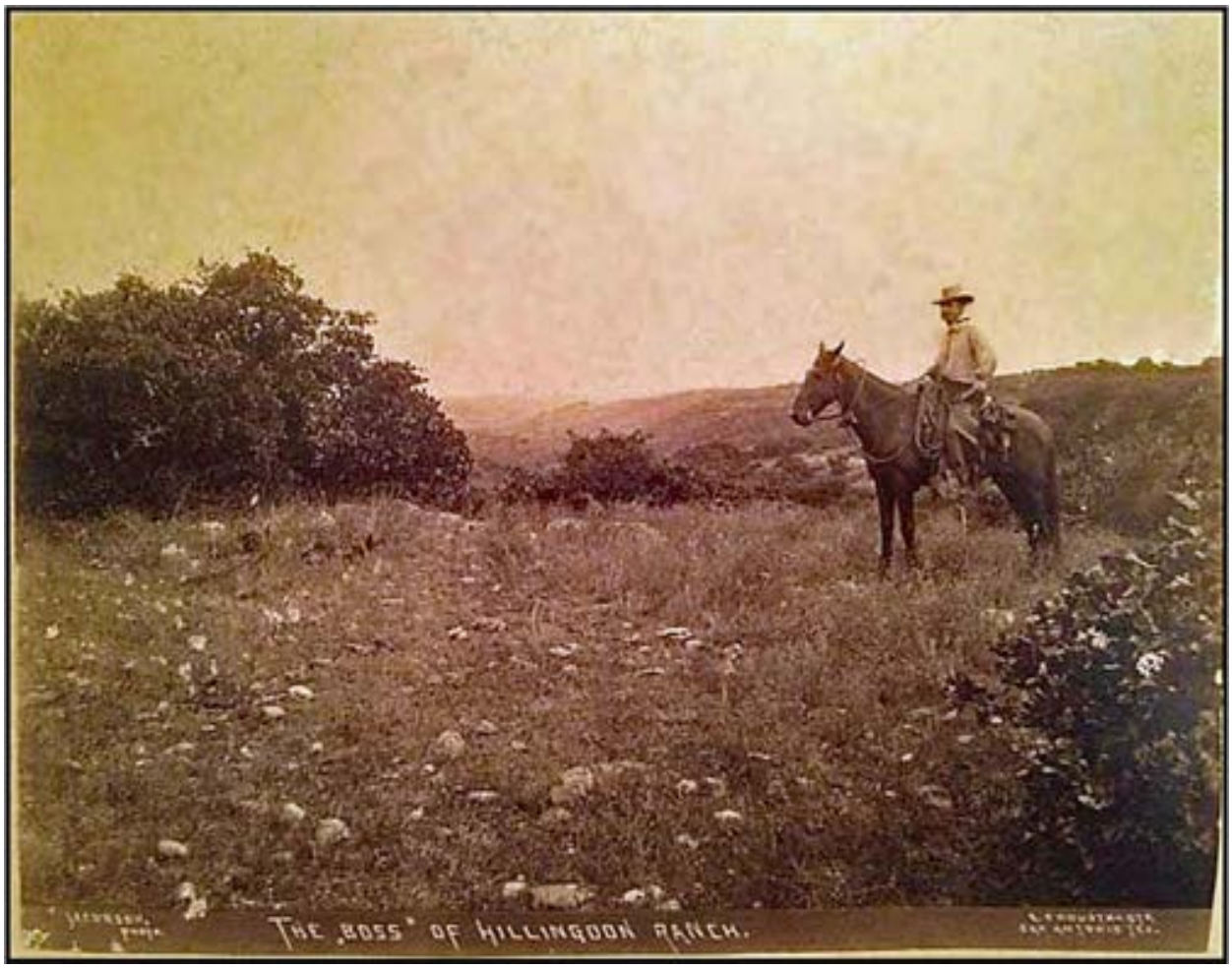


Figure 7. Alfred Giles on his Hillingdon Ranch near the divide between Comfort and Fredericksburg.

continued to increase the acreage. He became one of the first recorded landowners in that part of Kendall County (Fig. 7). At this time in Giles' life, he had completed approximately 40 buildings in Texas. His capacity for varied work and innovation was legendary.

The Comfort area ranch originally encompassed 13,000 acres; most are still owned today by his descendants. At a recent 130th ranch anniversary at Hillingdon Ranch, a family tree revealed some 300 descendants. Many Giles/James family members continue to reside in the Comfort area with surnames of Dreiss, Beckmann, Booth and their descendants too numerous to mention. In 1986 Hillingdon Ranch was designated a Texas Heritage Ranch. The remodeled existing ranch house became Giles' family's main home.

The family leased a second home in San Antonio for the winter seasons, as well as owned for a short duration their home at 306 King William Street, a house he designed. The second home enabled him to be close to his work when required and for Laura to be close to her kindred.

Ranch management seemed to be a joy and respite for architect Alfred Giles. He kept

consistent journal records pertaining to ranch business, his experiences with the crops, the cattle, the weather, the helpers. The Giles family worked the land and learned from the land. My husband and I recently went to Scotland driving along the verdant meadows with their black dots of Aberdeen Angus cattle the common bloodline of all the Angus now on the Hillingdon Ranch. It is said that Giles in remembering the pleasant days on trips to Scotland with his family, was struck by the similar look of the Texas countryside and decided to buy his first registered Angus cattle from Scotland. The cattle were shipped across the ocean before arriving at their new home of Comfort, Texas.

As today's ranch managers know, to practice conservation methods is a sustaining endeavor with future generations in mind. Giving to the land rather than taking from the land. Giles early on realized the importance of rotational grazing to eliminate overgrazing. His water catchments, installed windmills and diversified livestock enabled rotational grazing. By bringing cedar eating Angora goats into the pastures, the land would be cleared for the grasses to grow for the cattle and sheep. Cowboys would periodically round up the cattle and drive them to Giles' later acquired farm at Calaveras Creek near San Antonio, where they were fed corn and cottonseed before the sale to butchers in the city.

This pioneer rancher was one of the founding members of the Texas Sheep and Goat Raiser Association and a member of the Texas and Southwestern Cattle Raisers Association and the American Aberdeen-Angus Breeders' Association.

Traveling

It has been recorded that keeping up with his far-flung projects required almost constant adventurous traveling by Giles, so this is a subject unto itself.

Much of the communication with his family involved plans with trunks, with timetables, with manner of traveling, with scheduling helpers. A myriad of letters between the married couple ensues. Laura feels "horribly lonely" when either Alfred or the children are away. She writes from the isolated ranch, realizing that "I have such a little family now it's not so easy to travel around." And Alfred likewise writes often in his letters of how he misses his family.

Figure 8. Pigeon coop used by Alfred Giles is still standing.

To ease his family's worries, Alfred would regularly take a couple of homing pigeons with him to San Antonio - one to send home to the ranch when he arrived safely in SA, one to send to the ranch announcing his return so a buckboard could be waiting at the Comfort train station (Fig. 8). To visit San Antonio, they often stayed in the hotel in Boerne, then took the remaining 30

miles by train which took 2 hours. Another time mentioned is riding on buckboard from San Antonio to Comfort, and halfway staying over at Beasley's (sic) for shelter from a thunderous storm. Buckboard from the ranch to train in Comfort took 3 hrs. with Alfred often leaving the ranch at 3:30 a.m. to catch the 6:30 a.m. train in Comfort for San Antonio.

Life was going from Comfort to the San Antonio house in Oct. for winter, always packing and cleaning. One year Laura said "won't we have a queer load tomorrow – all the children, a parrot, a canary, a Jersey cow, a horse and a cook and trunks in a wagon and buckboard." And first there were moths to deal with in the trunks. On occasion they boarded the train in Comfort for San Antonio, but first met other family members who were staying at the Hotel Giles in Comfort (Fig. 9). "How slow and warm" the train trip was. But fortunately, Alfred had the San Antonio house cleaned and ready for them. Years later the train route from Fredericksburg to Comfort would have a Hillingdon Flag stop for the convenience of the architect, but this was not to be until 1913.

The family has not discovered any records of his likely troublesome travels to Mexico during the Mexican Revolution. However, a short stagecoach ride to Fredericksburg early in his career to check on the progress of the Gillespie County Courthouse project, proved quite exciting. Two armed men stopped the coach, likely at a point near the Pedernales crossing on the Old San Antonio Road, robbing the passengers at gunpoint. Alfred's gold pocket watch, a gift from his mother, was taken. Alfred made a deal with the robbers that he would divulge the place of hidden money if they gave him his watch. He then showed them $20 ($500 today) in the hidden spot in his boot and was given back his watch. This may have cast a spotlight on him, as he was then commanded to help sort out the mail for the robbers and next, to dangerously stop another oncoming stagecoach for the outlaws. Later, since witnesses saw Giles helping the robbers, he was brought before magistrates in San Antonio on suspicion of robbery until he explained the story. By the way, the driver mentioned this route as being fraught with mischief makers.

Figure 9. Giles designed 1897 St Charles Hotel, Kerrville. Razed in 1936. Formerly on Corner of Water & Sidney Baker Streets

Giles designed Ingenhuett/Faust Hotel, now called Hotel Giles, Comfort, on High Street (Photo courtesy of Hotel Giles)

To read more of the Alfred and Laura Giles story click the links below for parts III and IV.

Part III starts on page 5.
https://www.ci.boerne.tx.us/DocumentCenter/View/15041/Echoes-vol-31-December-2020?utm_source=Winter+Archives+Newsletter&utm_campaign=Archives+Newsletter+Winter+2020&utm_medium=email

Part IV starts on page 10.
https://www.ci.boerne.tx.us/DocumentCenter/View/15631/echoes-vol-32-March-2021

Acknowledgments

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Exchange Items in an Archaic to Prehistoric Site on the Guadalupe River

Terry Farley, Mike McBride, Steve Stoutamire & Francoise Wilson

ABSTRACT

Initial excavation work by the Hill Country Archeological Association began at site 41KR754 in 2018 and continues to present. Numerous artifacts, not locally sourced, have been found in an archaic-to-prehistoric assemblage at a multi-component site located on the north branch of the Guadalupe River in western Kerr County. The items discovered in situ include obsidian sourced from Malad, Idaho, crystal quartz, vein quartz, hematite spheres, ochre, and ceramic sherds. Projectile points from the archaic site span the middle archaic to late prehistoric Toyah phase providing estimated dates for the items discussed.

INTRODUCTION

One of the mysteries about artifacts not locally sourced is how they came to be in an archeological site. We do not know whether the items were bartered or were gifted. We do not know how many individuals or groups may have handled a particular artifact as it traveled from its origin, sometimes over ~~a~~ great distance, to the site where it was recovered. Obsidian sourced to Malad Idaho recovered in site 41KR754 is a good example of this mystery. Was the obsidian "sold" by trading goods or was it exchanged as a gift to cement good relationships between groups? We may never know all the answers to these questions. However, by discussing artifacts in articles such as this one, we hope to contribute to the body of knowledge about exchange items.

Dr. Tom Hester encourages use of the term "exchange" rather than "trade." He also suggests that some of these artifacts may have been used as part of religious functions (Hester). Most of the exchange items in this site are rather exotic rather than functional. Even the ceramic sherds may have been exchanged. They vary in tempers, paste, and surface treatments. Two of forty-six sherds fit together. No large sherds or vessels have been recovered.

BACKGROUND

Site 41KR754 lies on the Edwards Plateau at the foot of a bluff on a late Pleistocene/Early Holocene terrace, sloping downward to a Middle/Late Holocene terrace bounded by the North Fork of the Guadalupe River (Figure 1). Two burned-rock middens are present. The larger midden, "A" lies in the northern portion of the site. Midden "B" lies 49 meters southeast of "A". The Paleo-Indian portion of the site is discussed in other articles by Stoutamire, S. and Wilson, F. (Stoutamire, 2021).

Eight contiguous units 1-6, 17 & 18 were excavated, as well as separate Unit 7 and Unit 8 (which did not yield artifacts). Units 1-6 & 17-18 contained fire-cracked rock (FCR) hearth

formations. Excavation depths for the units ranged from 60-100 cm bs (below surface, in 10-centimeter levels). Abundant American Bison *(Bison bison),* canid, and deer bones were found in these units. 2°and 3° blade flakes with use wear were especially abundant, suggesting late-stage butchering may have been occurring.

When Units 1-6, 7, and 17-18 were no longer yielding artifacts, five 50 cm x 50 cm shovel tests, spaced 10 meters apart, were opened along the west side of Midden A to determine the extent of the cultural area. Each shovel test had FCR hearth formations, as well as points, tools, and trade items. Recently, a trench was hand-dug from west to east toward the midden, incorporating shovel test 3. To date, artifacts have been recovered from a depth of 110 cm below the surface (bs). Items discovered during these excavations were ochres, obsidian, hematite and ceramics. This is an effort to determine whether there are artifacts associated with even older culture under the midden surface.

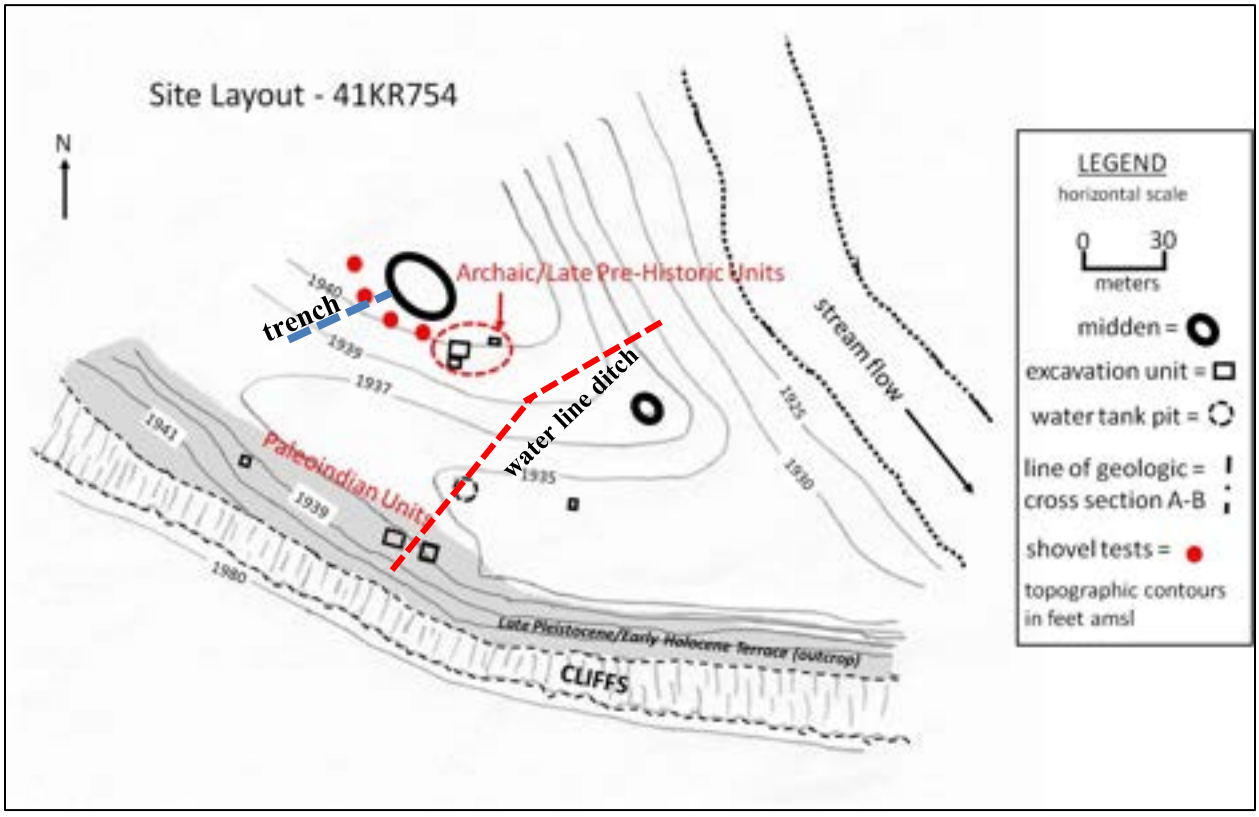

Figure 1. Site Map for 41KR754. Map created by Steve Stoutamire.

DISCUSSION

Ochre

Ochre is a natural clay earthy material utilized as pigment and is thought to have been an important trade item among prehistoric indigenous peoples. It is commonly found within archeological sites. Color ranges from yellow to brown to reddish black. Red ochres generally contain hematite (Fe_20_4) "an iron oxide which forms when the soluble ingredients of glauconite or other reduced iron deposits leach out, leaving concentrations of iron. The blackish red to brick-red color varies with the degree of hydration and the presence of impurities." (Ellis et al. 1997).

Thirty nodules of red ochre have been recovered from multiple units (including the Paleo-Indian units). The nodules range in size from less than 0.5 cm to a maximum of 3x3 cms. Two manos with red stain, possibly ochre, on the grinding surfaces have been recovered (Figure 2). One mano Lab Catalogue (LC) number (LC2477) from Unit 18, 40 cm bs, measures 12 x 7 cm. The second mano (LC181) from Unit 5, 29 cm bs, measures 9x5cm suggesting it may have been used to crush pieces of ochre into a powder. Red stains have also been found on ground stone artifacts in the rock shelters in Val Verde County (Pearce and Jackson 1933:88).

Hematite outcrops can be found in the Llano uplift, (Schoch 1918), as well as in joint or fault surfaces in an old silver mine approximately 22 miles north of Uvalde, Texas. (Evans, 1975). Beds of ochre have been found in East Texas Eocene Weches Formation (Sellards et al. 1932). Other sources for ochre outcrops include Coke County (Shafer, 1969), Taylor County (Ray 1929; Sayles 1929), McLennan County (Miller 1951; Watt 1969). Haunted Hill and Basin Hill in McLennan County have visible mounds of hematite, limonite, mica and shale (Miller 1951; Watt 1969; Watt 1974).

Figure 2. Mano with red ochre stain (left) and two pieces of red ochre. A red streak is created on paper when red ochre is rubbed on it.

The specific uses of the ochres in 41KR754 are unknown. Historically, red ochre has been utilized as pigment for pottery (Perttula 1992). While there is no evidence that pottery was created at this site, a number of recovered pottery sherds in the site have red or orange exterior surfaces. Ochre was also utilized for body and clothing decoration (Heizer and Elasser 1980), as well as an astringent on wounds (Levey and Al-Khaledy 1967). Further, ochre was used for tanning hides, for preserving food and wood, and as an insect repellant (Erlandson, Robertson and Descantes 1999). Red ochre was often used ritually in burials, rubbing it on the deceased's skin, painting it on objects accompanying the body, or sprinkling the ochre over the deceased in burials. Ochre pigment was used extensively in the rock art in Seminole Canyon (Shafer 1969; Turpin 1982).

Four small nodules of yellow ochre (limonite, a mixture of goethite $Fe_2O_3 + H_2,0$ and other minerals) have been recovered from Unit 7 at levels 4 & 5. A yellow ochre "crayon" has also been recovered from the Trench west of Midden A, at level 4. It measures 6cm long by 2.5 cm wide at the midsection. There is an incision on one side of the crayon (Figure 3).

Figure 3. Yellow ochre (left) and yellow ochre "crayon." Yellow ochre colors the paper when rubbed on it.

Yellow ochre was considered a charm protecting the Comanches in war (Smithwick 1900). The Caddo also prepared for war using ochres for face paint "to keep their enemies from recognizing them." (Hatcher 1925).

Ceramics

A total of 46 recovered ceramic sherds are consistent with a post AD 1300 Toyah ceramic component. All the initial units (1-7,10, 17,18, & 30) yielded sherds. Shovel tests 1W & 5W also yielded sherds. Six "sherdlets" measuring less than 1.5 cm were not evaluated.

The majority of the sherds are consistent with Leon Plain ceramics. Seven sherds have fingernail punctations (Figure 4). One bone-grog tempered Caddo sherd has a fingernail punctation. The other six sherds with fingernail punctations have temper, paste and surface treatment basically the same as the Leon Plain. Tim Perttula evaluated the sherds and indicated that fingernail punctations have been noted in sherds at site 41SS192, that were not consistent with Caddo. Three Doss Red sherds were also recovered.

Figure 4. Fingernail punctations.

Figure 5. Doss Red sherd.

Twenty sherds have burnished exteriors and interiors. Eight sherds have both smoothed interiors and exteriors. Seven sherds have burnished exteriors and smoothed interiors. Two sherds have smoothed exteriors and brushing/wiping interiors. One sherd has a smoothed exterior and a burnished interior. One sherd has no exterior treatment and a wiping interior. One has a burnished exterior, with no interior treatment (Communication with Tim Perttula).

One and one-half miles southeast of this site, is a second site, HCAA-KR-45, where ceramic sherds have also been recovered. They are very similar to the sherds in 41KR754.

Quartz

Forty-two pieces of quartz have been recovered from Units 1-7, 17 & 18, as well as from shovel tests 1W, 4W, and 5W. These have been found as shallow as on surface to depths of level 5 (40-50 cm bs). A deep excavation in Unit 5N yielded a cluster of vein quartz crystals with iron oxide stain at level 17/18.

Three clear crystal quartz flakes have been recovered (Figure 6). Lab Catalogue (LC) LC187 is from Unit 5, level 3. A thin irregular percussion flake with a natural notch on one side has heavy use wear. There is also lighter use wear on other edges. Size is 3x2 cm (Stoutamire 2021).

LC1342 is a prismatic clear crystal quartz flake recovered from the surface. It has a pressure-flaked notch in one side. It has moderate to heavy use-wear in the notch and along that side of the flake. There is also lighter use-wear on other edges. Size 4x2 cm.

A third clear crystal quartz flake (LC2347) has been recovered from ST (shovel test) 4W, level 2. It is a thin percussion flake with a pressure-flaked notch on one side margin. A second pressure-flake notch is on the obverse side of the flake with heavy use-wear on one edge between the notches. Size 1.5 x2.2 cm (Stoutamire 2021).

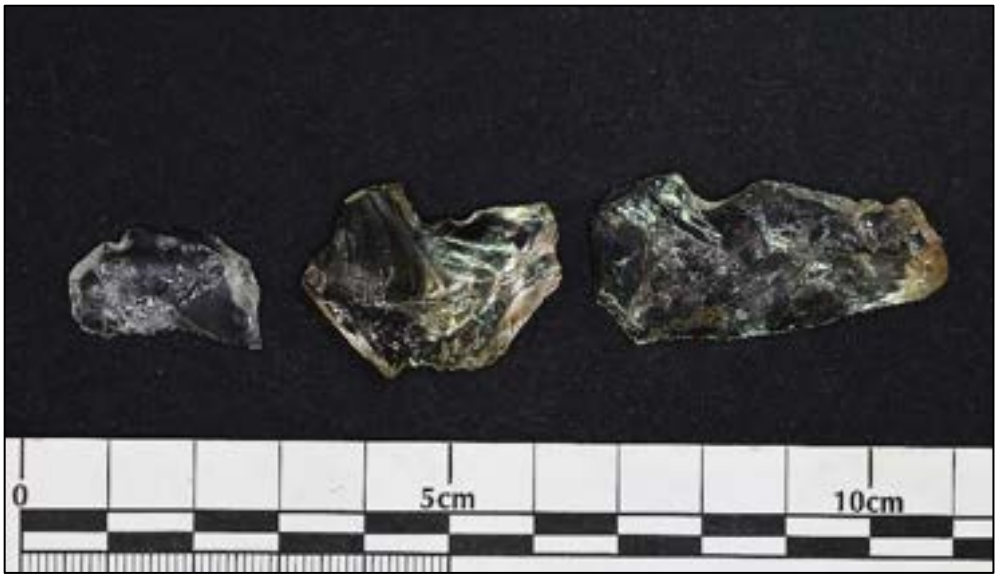

Figure 6. Three clear crystal quartz flakes were discovered, LC187, LC1342 and LC2347 (L to R).

Two vein quartz flakes were also recovered. LC2353 is a prismatic flake from ST 4W at depth of 18 cm bs. A pressure flake notch on one side has light use-wear within the notch and there is heavy use wear along that margin, as well as two other margins. The flake is 2.9 cm wide x 1.4 cm long x 0.7 cm thick.

The second vein quartz flake is from Unit 4, at depth of 16 cm. LC723 is vein quartz flake with a shallow notch on one side and has minimal use wear, as well as a deeper pressure notch on an adjacent edge with heavy use wear, both within the notch and along its margin. Size is 3cm x 1.7 cm x 0.7 cm thick (Stoutamire 2021).

While there are a few small geodes containing quartz in the vicinity, none are large enough to be the source for the three clear crystal quartz flakes described above. Quartz pieces LC187, LC1342, and LC 2347 were possibly sourced from the Ouachita Mountains of Southern Arkansas. The vein quartz may have come from weathered granite outcrops in Mason and Gillespie counties.

Obsidian

Two obsidian flakes were recovered in Unit 1, one flake (LC288) at 27 cm bs and the other flake (LC945) at 45 cm bs (Figure 7). Flake LC288 measures 1.4 x 1.0 x 0.13 cm thick while the LC 945 flake measures 1.5 x 1.1 x 0.2 cm thick. The smaller flake has a bulb of percussion while the slightly larger flake has a flake scar. The flakes were submitted to the Archaeometry Laboratory, Research Reactor Center, The University of Missouri, Columbus for sourcing. Dr. Michael Glascock of the Texas Obsidian Project performed non-destructive X-ray

fluorescence and sourced the flakes to Malad-Wright Creek in southeastern Idaho. (Stoutamire 2021).

Figure 7. Obsidian flakes sourced to Malad, Idaho, LC288 and LC945 (L to R).

There are at least 35 sites with obsidian in east central Texas. Several of them are sourced to Malad, Idaho. Dr. Tom Hester suggests that obsidian may have been brought into the eastern edge of the Edwards plateau by way of exchange or a trade route (Hester 2022)

Hematite Concretions

Most interesting are four hematite (Fe_2O_3) concretions recovered from the site *(*Figure 9). Two of the concretions were recovered from Unit 18, both at depth of 19 cm bs. One (LC 3485) is a specular (shiny) exterior surface concretion measuring 2.75 cm x 2.5 cm. The second (LC2483) is a concretion with a dull exterior. It measures 3 cm x 3.5 cm. A third specular concretion (LC 839) was recovered from Unit 4 at depth 29 cm bs. It measures 2.5 cm x 1.5 cm. Very recently a broken hematite concretion (LC2481) with slight specular exterior was recovered in screening soil from the Midden A/trench 1W in level 4 (30-40 cm bs). This broken concretion provides a profile of the layers which accumulated in the process of creation. The specular exterior has abundant fine mica inclusions.

Nearby, site HCAA-KR-45 has also yielded a total of five hematite concretions (Figure 10). One is more red, while the four other concretions are more red-brown. This may suggest that the concretions originated from more than one source.

Figure 9. Hematite concretions recovered during excavation at 41KR 754. The concretions (L to R) are specular, dull, mildly specular and broken specular concretion with fine mica inclusions.

Figure 10. Five hematite concretions from HCAA-KR-45. All have specular surfaces of varying degrees. The first one on the left is redder than the other four.

The closest source for hematite concretions is the Woodbine formation of Dallas and Tarrant counties. The concretions form when solutions deposit around a "seed" or nucleus of sand or organic material. The hematite gives the concretions a reddish-brown hue. (https://dallas paleo.org/surface – Geology of Dallas and Tarrant Counties). Hematite concretions may also have been imported from the Ouchita Mountains in central Arkansas (Foster 2012). The concretions are theorized to have been used as game pieces or as charms (Moorhead 1912).

Prehistoric hematite objects such as grooved axes, celts, nutting stones, manos, pendants and plummets are more common in East Texas (Turner 2006). Hematite plummets have been recovered from the Buckeye Knoll Archeological Site, Victoria County, Texas (Ricklis 2009). A hematite cone was recovered in Smith County, Texas (Walters 2012). Hematite plummets have also been found at Poverty Point site in West Parroll Parish in Louisiana. Hematite tools and ornaments are more commonly found in middle and eastern states such as West Virginia, Ohio, Michigan, and Missouri (Moorehead 1912).

CONCLUSIONS

We were privileged to recover obsidian, ochre, hematite concretions and ceramics in this site on the Edwards Plateau. We do not know whether the objects were traded or exchanged. We do know they came by trade/exchange over 1400 miles. We also suggest that trade/exchange among tribes occurred from at least 4500 years ago to perhaps 400 years ago. We suggest this because some of these trade items were found with diagnostic dart and arrow points. For example, the obsidian was found with a possible Marshall point (Middle Archaic 2500 BC-1000 BC). The red ochre was also found with a Marshall point, but also with Frio points (Late Archaic period 1000 BC-300 BC). The hematite concretions were also recovered from the Late Archaic period (1000 BC-300 BC) with Frio and Montell points. The ceramic sherds appeared more recently, in the Toyah phase, 1300 AD - 1600 AD, since they were found with a Perdiz arrow point. These findings are consistent with findings of Hester (1986, 2004) and those mentioned earlier in this paper.

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Paleoindian Earth Ovens and a Stone Cooking Griddle: New Evidence from Crying Woman Ranch, 41KR754, Kerr County, Texas

Mike McBride, Françoise Wilson, and Steve Stoutamire

ABSTRACT

Since last reported in 2021 (Stoutamire et al, 2021), the Hill Country Archeological Association (HCAA) has continued field work investigations at Crying Woman Ranch (CWR), 41KR754, a multi-component site in western Kerr County, Texas. Building on previously reported evidence, we present new data which further supports and broadens our previously reported evidence of Paleoindian occupations at the site.[1] This evidence includes new radiocarbon dates, many more examples of St. Mary's Hall (SMH) diagnostic lithics, and 3 newly recovered projectile points of other Paleoindian period types (Golondrina, Angostura, and probable Dalton). New C14 dates on both a *Bison antiquus* bone sample, and charcoal recovered from a newly excavated thermal feature, further validate the occupational time periods. The excavation of multiple earth ovens, as well as an *in situ* stone cooking griddle, are determined to be in Paleoindian period occupations through direct radiocarbon dating and direct associations with numerous Paleoindian period lithics.

INTRODUCTION

In the canyon lands of western Kerr County, 41KR754 is located on a river terrace of the North Fork of the Guadalupe River. The site has a seven-acre occupation area, two mounded burned rock middens, evidence of a historic homestead, and a separate Pleistocene terrace. The entire southern side of the site is bordered by a limestone bluff varying from 20-50 feet in height. The site ranges in elevation from 1920-1955 feet above sea level (Figure 1).[2]

HCAA was contacted in June 2018 by the owners of the site, who asked to have an archeological assessment done on possible sites on their ranch. The site was assessed with a pedestrian survey by members of the HCAA in July, 2018. This site was eventually recorded as 41KR754 and is the subject of this article.

As our research work began, the landowner related the story of his wife's first visit to the property after it had been purchased. She was emotionally taken with the beauty of the location, and wept. An HCAA crew member proposed the designation of "Crying Woman Ranch" for the site, and it was happily embraced by the landowner couple.

[1] With the authors' permissions, sections of this report were adapted from Stoutamire et al. 2021.

[2] All figures, photos, and illustrations by Mike McBride, except where noted.

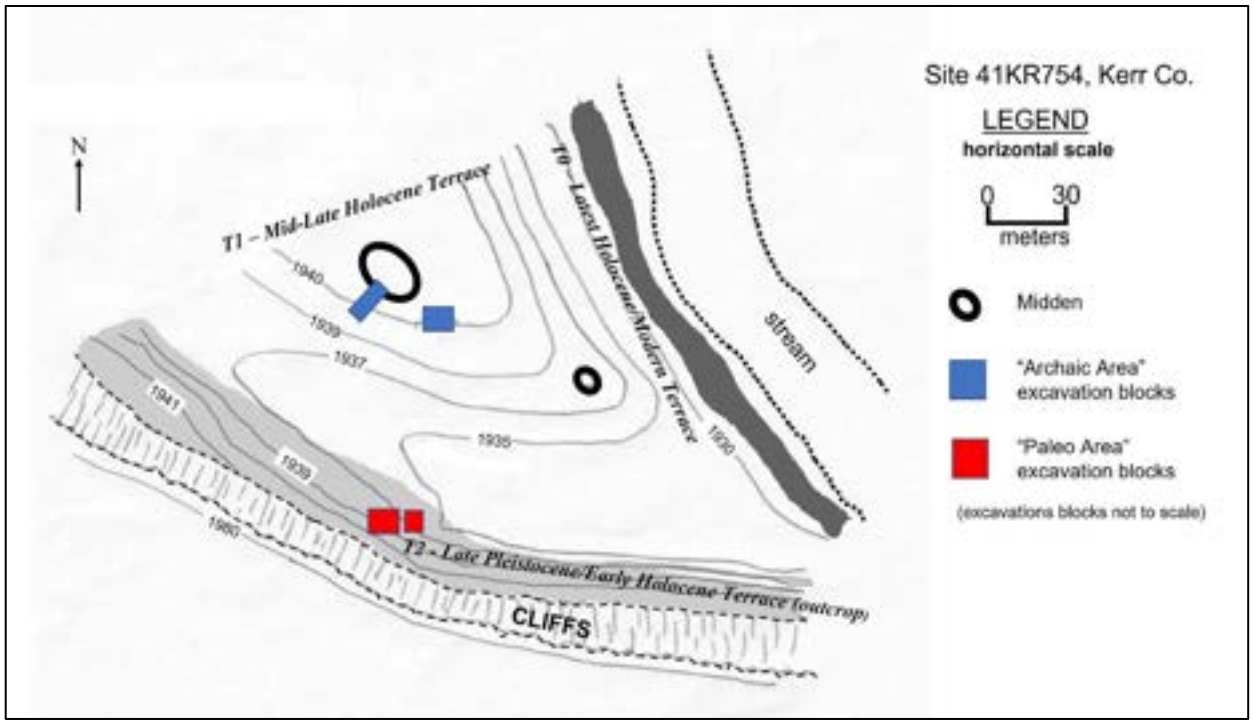


Figure 1. Site Layout of 41KR754. Map by Steve Stoutamire and Mike McBride.

After an initial pedestrian survey of the midden areas of 41KR754 revealed dense surface scatters of cultural lithics, contiguous Test Units (U) 1-6, 17, and 18 were opened over the next 2 years, covering 19 square meters of surface area in the northern area of the site.

These excavations in what is now designated as the "Archaic Area" of the site yielded material culture of Middle Archaic through Late Prehistoric age. Recovered point types from these deposits and surface collection represent the millennia of recurring occupations at the site, representing Central Texas prehistory from Late Prehistoric, through Transitional Archaic, Late Archaic, Middle Archaic, and Early Archaic (Figure 2). Additionally, recovered faunal material includes *Bison bison*, deer, wild turkey, and teeth from a canid (either wolf, *Canis lupus*, domestic dog, *Canis familiaris*, or coyote *Canis latrans*) (Stoutamire et al. 2021).

Figure 2. Examples of the arrow and dart projectile points recovered from the "Archaic Area".

EXCAVATIONS AND DISCOVERIES IN THE "PALEO AREA"

With the fortuitous discovery of a SMH Paleoindian point in July 2019, the field team turned its attention to the southern part of the site (Figure 3). Over the past 3 years, geoarchaeological research, excavations, and surface survey have subsequently defined this area as a Late

Figure 3. Craig Mangham and the discovery of the first SMH point in the "Paleo Area". Photo by Marvin Gohlke, Jr.

Pleistocene/Early Holocene Terrace, now designated the "Paleo Area" of the site. Excavations have yielded additional SMH and Angostura points, as well as single Golondrina and Dalton points as evidence of multiple occupation events in the Middle and Late Paleoindian Period.

Discovery of a Griddle Cooking Facility Within Paleoindian Levels

Test Unit Block 1: Units 9, 11, 14. Excavations in the initial Test Unit Block (Block 1) began with adjacent Units 9 and 11, excavated to a depth of 1 meter (Figures 4a & 4b). These units appeared to have mostly undisturbed stratigraphy, yielding a Late Paleoindian period Angostura base at 7 cm bs (below surface) depth, and an Early Archaic period Early Triangular projectile point at 33 cm depth, both in Unit 9. Additional diagnostic lithics comprised solely of SMH points and fragments were recovered at levels from 24cm to approximately 1 meter. Note that all but one SMH specimen were recovered below the Early Triangular point depth. possibly suggesting mostly undisturbed stratigraphy. These units produced a few scattered random FCR pieces, but no evidence of organized thermal features.

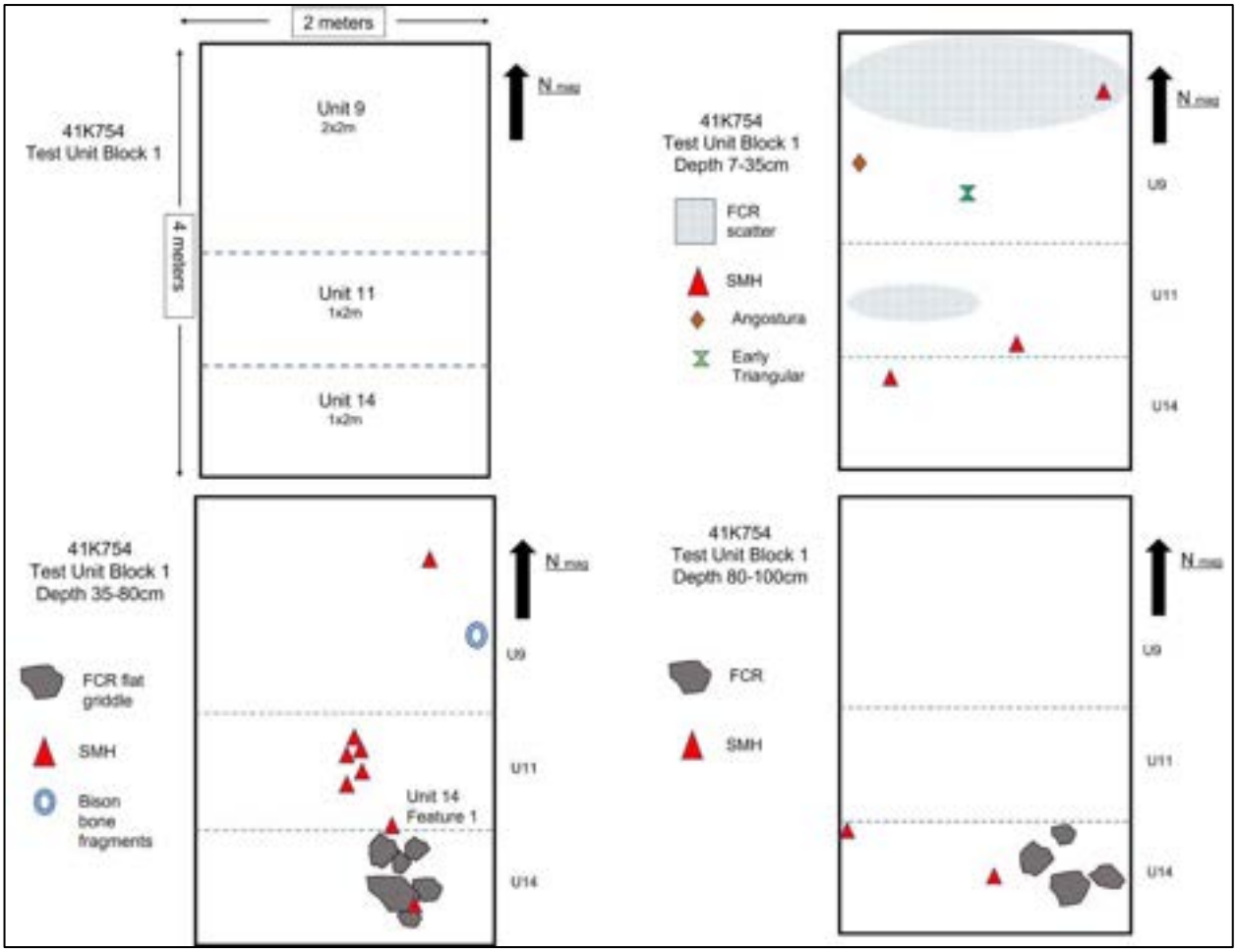


Figure 4a. Test Units Block 1: Progression of excavation depths and diagnostic artifacts and features recovered.

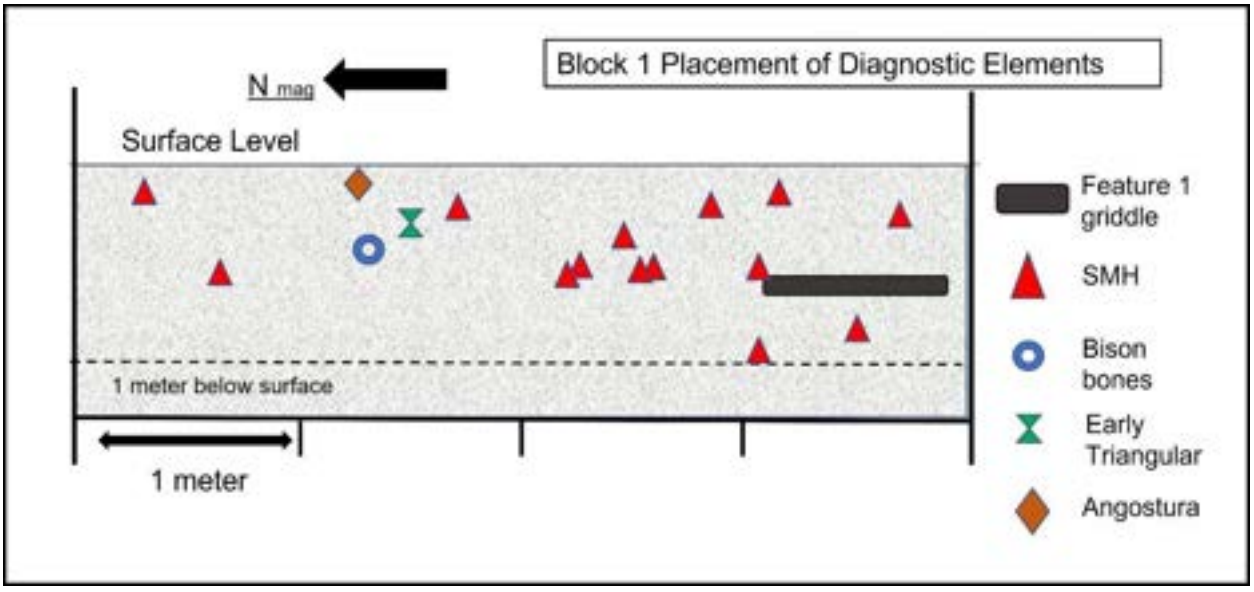


Figure 4b. Test Unit Block 1: Horizontal and vertical placement of diagnostic artifacts and Unit 14 Feature 1.

Three pieces of bone material (Figure 5) were found at a depth of 53 cm in close association with one of the SMH points (Figure 4a & b). Cultural lithics such as chert debitage, utilized flakes, and a chopper were also recovered in association with the bone. Dr. Mary Prendergast, of Rice University, identified one specimen as probable *Bison antiquus* (report on file), providing more temporal context to the SMH point type and the excavation block. This specimen initially yielded a conventional radiocarbon age of 9060 ± 30 BP (Attachment 1. Beta-555186). Using INTCAL 13, this date range was calibrated at two-sigma 10,248 to 10,193 BP. Analysis of the same specimen from second AMS lab was reported with 94% confidence level as cal 10,665 to 10,370 BP (Attachment 2. PSUAMS-10670). Both dates clearly anchored the excavation level, as well as the associated SMH point in the Middle to Late Paleoindian Period. Additionally, a unique bifacially flaked perforator was recovered at 67 cm in Unit 14 (Figs. 6a & 6b). Analysis of the morphology and remnant flaking pattern showed it to be a reworked SMH point. Two more perforators were discovered nearby in Units 9 & 15 that appear to be reworked SMH points (Fig. 6b).

Figure 5. Bison antiquus long bone and scapula fragments, Unit 9. Photo by Steve Stoutamire.

Figure 6a. Perforator discovered in Unit 14. Thought to be a reworked SMH point.

Figure 6b. Perforators from Test Blocks 1 & 2, Units 15, 9, and 14 (L-R). All are thought to be reworked SMH points.

Block 1 was expanded with Unit 14, working south from the south wall of Unit 11. Unit 14 was initially excavated to Level 6, a depth of 60 cm, and continued to yield SMH lithics, but no organized FCR.

After several months of Unit 14 inactivity, a second, literally identical, bifacially flaked perforator was fortuitously recovered protruding from the eroding surface of Level 6 (60 cm). This perforator was clearly a reworked SMH point, (Figs. 6a & 6b) giving a potential lithic "date-range" anchor to the unit and level.

The recovery of this artifact in December 2021, prompted renewed excavation in Unit 14, concurrent with Unit 19/20 excavations. As Level 7 (below 60 cm) was dug, a layer of FCR emerged. This layer was unlike any other limestone assemblage seen at the site. The blocks of limestone were arranged in a flat, "griddle-like" surface, approximately 60x40 cm (Figure 7). Most of the blocks were somewhat tabular in shape, laid side-by-side like a small pavement, several were heat-cracked in place, and all were *in situ* without noticeable disturbance.

Figure 7. Unit 14 Feature 1, stone cooking griddle.

This feature was recorded as Unit 14 Feature 1. Continued excavation around the feature formed a pedestal, without evidence of other significant FCR on the perimeter. The feature and pedestal were thoroughly photographed for photogrammetry.

After photography, the individual stones were numbered, and the limestone layer was disassembled removing individual stones in sequence, photographing and video recording the process (Figure 8). Significant chunks and smears of charcoal were found directly beneath and

adhering to several of the individual stones, surrounded by orange-tinted burned soil. All charcoal and soil in the pedestal were collected, and samples were individually tagged and bagged, the charcoal samples were wrapped in foil before bagging.

Figure 8. Unit 14 Feature 1 - Disassembly of feature and charcoal collected under cooking rocks.

In addition to the SMH-type perforator recovered directly above Feature 1's topmost level, 2 more SMH fragments were recovered in direct association with the feature; within 70 cm of the feature stack, at 74 & 80 cm depth.

Charcoal samples from the Unit 14 hearth were analyzed and prepared for AMS analysis by Dr. Leslie Bush, who characterized the samples as "Hardwood, some but not all probably oak" (Report on file with author). Analysis by the Penn State University AMS lab yielded a date with 95% probability of cal 10,406-10,232 BP (Attachment 3. PSUAMS-11630).

After disassembling the pedestal, excavation continued to Level 11, 110cm depth. A group of loosely associated limestone nodules appeared at approximately 90 cm depth and noted as Unit 14 Feature 2. This feature was recorded and disassembled; however, no charcoal or other datable material was recovered.

Discovery of Multiple Earth Oven Cooking Facilities Within Paleoindian Levels

Test Unit Block 2: Units 13, 15, 16, 19, and 20. To expand this very productive research area, Test Unit Block 2 was opened in the summer of 2020 (Figure 9). This second block is located 8

meters to the west of the initial block. Beginning with Unit 13 in the second block, evidence of FCR began at approximately 22cm below surface, and designated as Unit 13 Feature 1. Due to the size of the feature, the block was expanded by opening Units 15 and 16, with the entire 3x3 meter block excavated to a depth of 1 meter.

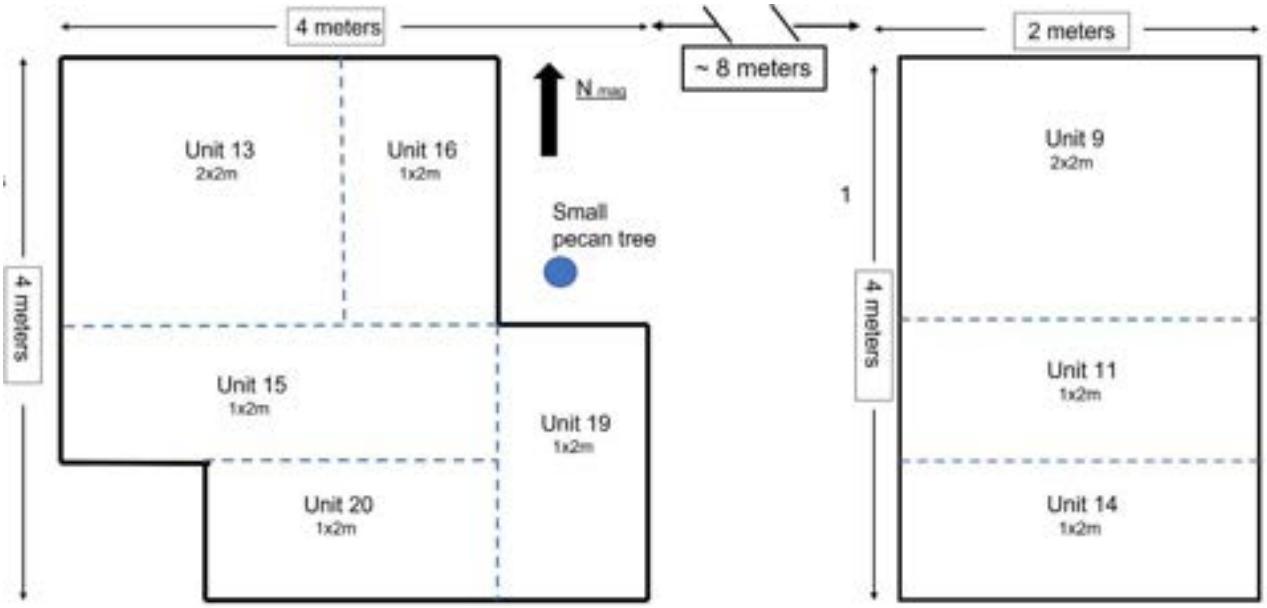


Figure 9. Test Units within Blocks 1 & 2 with Unit designations.

Evidence of FCR appeared in Unit 16 within the first 20 cm of digging. This developed into more concentrated remnants of an organized cooking feature within the top 30 cm of this unit and extended to a maximum density at around 40-50 cm depth.

The excavation progression of Feature 1 in adjacent Units 13 and 15 from 30 to 90 cm showed the same type increases in FCR density and organization of a similar, but deeper FCR concentration at 50-70 cm (Figure 11). Both FCR concentrations showed significant disturbance and a broad FCR scatter, likely evidence of multiple cooking events.

SMH diagnostic lithics, as well as a Clear Fork Tool were recovered at most levels from 7 to 83 cm, in association with, and within, the large combined FCR piles (Figure 12a). Notably, a broken Dalton base was recovered on the southeast margin of the feature, deep within Unit 16 at 91cm (Figure 12b). Adding to the Paleoindian Period lithics, Dalton is dated at 10,500-9,900 BP, temporally identical to SMH (Turner et al. 2011: 79-81).

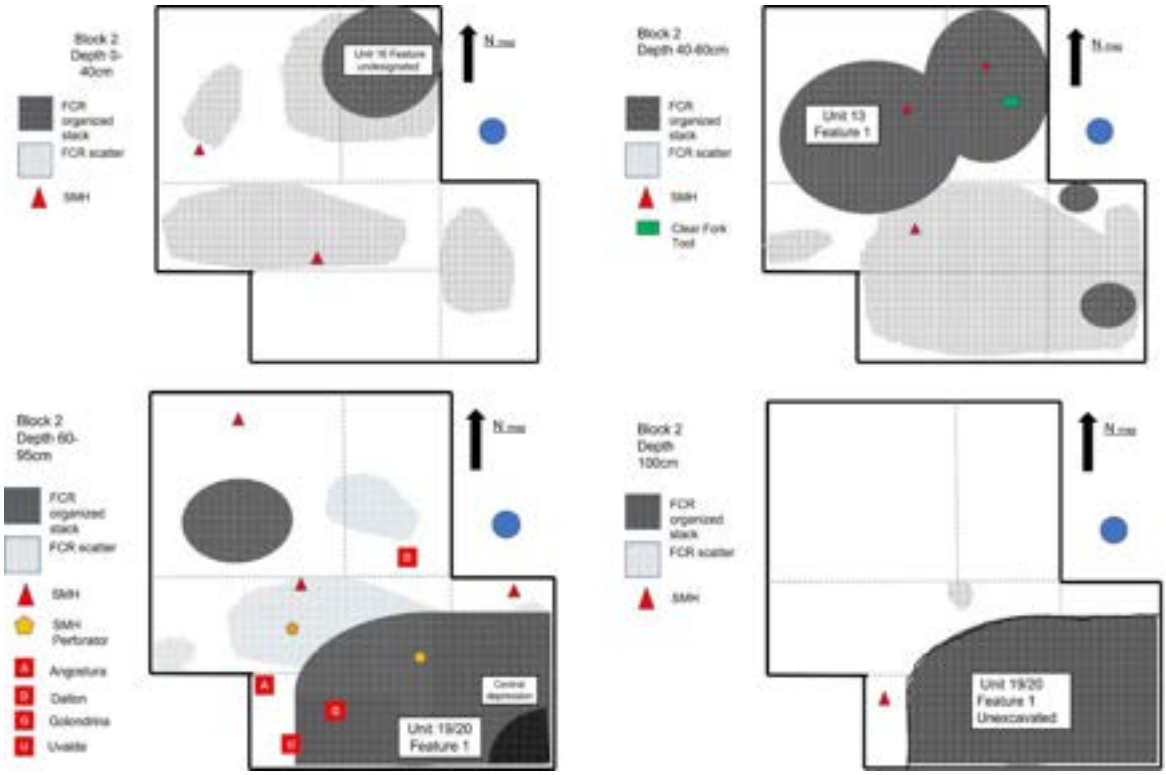


Figure 10. Test Unit Block 2: Progression of excavation depths and diagnostic artifacts and features recovered.

Figure 11. Units 13 and 16 showing earth oven structures and FCR scatters. Photos by Françoise Wilson.

Figure 12a. Paleoindian lanceolate points from CWR. Assemblage of St. Mary's Hall points.

Unit level drawings were made of the stack, and charcoal was recovered *in situ* from several of flat FCR elements. Subsequent AMS lab preparation and analysis of the charcoal samples failed to yield any C14 dates. However, this first well-defined thermal feature, with directly associated SMH and other Paleoindian Period lithics, represented a rarely reported instance of plant resource use in the Paleoindian period.

Figure 12b. Paleoindian lanceolate point from CWR. A Dalton point base.

The feature was documented and disassembled, and Units 13, 15, and 16 were excavated to 1 meter. Significant FCR in Unit 16 was not found below 60 cm, and the FCR in Unit 13 abruptly ended at approximately 95 cm. Except as described below, no FCR associated with Unit 13 Feature 1 was present on the block floor at 1 meter depth.

Apparently not associated with the large Unit 13 feature, evidence of more layered FCR appeared in the south wall of Unit 15, prompting the opening of Units 19 and 20. In Unit 19, a heavy accumulation of FCR appeared at approximately 50 cm, and was spread through most of the exposed unit top level. After soil was removed to expose the FCR layer, excavation was halted, and the feature was left intact at the 60 cm level.

Unit 20 extending south and west was opened, and a continuation of the heavy FCR layer appeared in the same level at 50cm. Careful excavation of both units defined a very large, very organized

thermal feature (Unit 19-20 Feature 1) spread over 1.5 meters through both units (Figure 13a & b). Positions and *in situ* fractures of the individual FCR elements gave the appearance of the feature being mostly intact with minimum disturbance and FCR scatter. After initial excavations defined the top and partial perimeter of the FCR stack, digging was halted to allow for more expert inspection and advice on how to proceed.

Figure 13. Units 19-20 Feature 1. (left) Ed and Craig documenting large Feature 1. (right) Feature 1, looking east.

Significantly, in Units 19 and 20, SMH lithics were recovered in direct association with the feature, i.e., within 20cm of the FCR perimeter on both the northeast and southwest sides. Also notably, a group of 3 projectile points – Golondrina, Uvalde, and Angostura - was recovered from Unit 20, slightly above the FCR stack, at approximately 60-63 cm, all in a horizontal circumference of less than 50 cm (Figure 14). A discussion of possible soil disturbance processes is discussed below.

After consultations with several of our professional colleagues, further excavation in Units 19 and 20 was halted in the summer of 2022 to widen Block 2 to fully expose the entirety of this important feature.

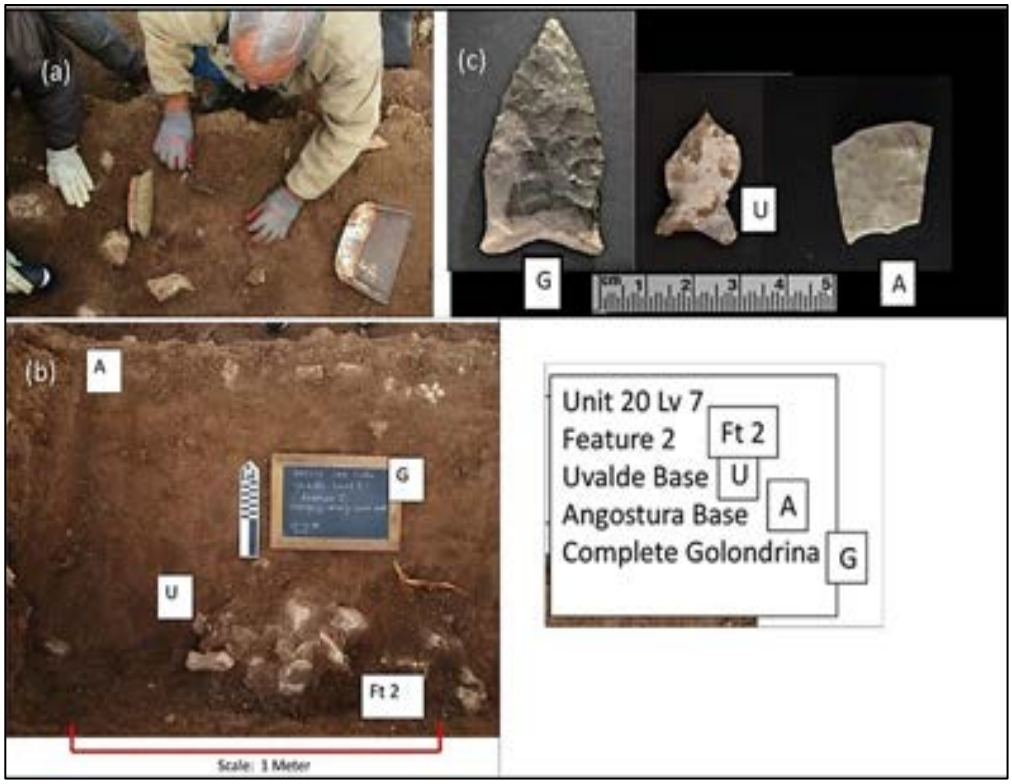


Figure 14. Unit 20: (a) Recovery of the Golondrina point., (b) Schematic of unit level 7 showing locations of Golondrina, Uvalde base and Angostura base. (c) Recovered points (l to r), Golondrina, Uvalde, and Angostura.

DISCUSSION

Test Unit Block 1

There is a marked difference in the occupation activities of this block, as compared to Block 2. The sole definable feature in the block is the griddle-shaped limestone arrangement, Feature 1 in Unit 14 (see Figures 7, 8, and 15). However, the block also yielded very valuable diagnostic elements such as charcoal from the thermal feature, multiple diagnostic artifacts, and datable bison bone.

Anchoring the contextual interpretation is the radiocarbon date range of cal 10,406 – 10,232 BP, from charcoal directly adhered to the bottom of Unit 14 Feature 1 cooking elements. Additionally anchoring the temporal context is the date range of cal 10,665-10,370 BP, from the fragment of *Bison antiquus* bone in Unit 9.

At least 12 SMH diagnostic points or fragments have been recovered within a 1.5-meter radius of the cooking feature, with the majority of them located in a vertical range of +/- 20cm from the level of Feature 1. Moreover, at least 6 specimens are either in near contact with the griddle structure or within 60 cm of it.

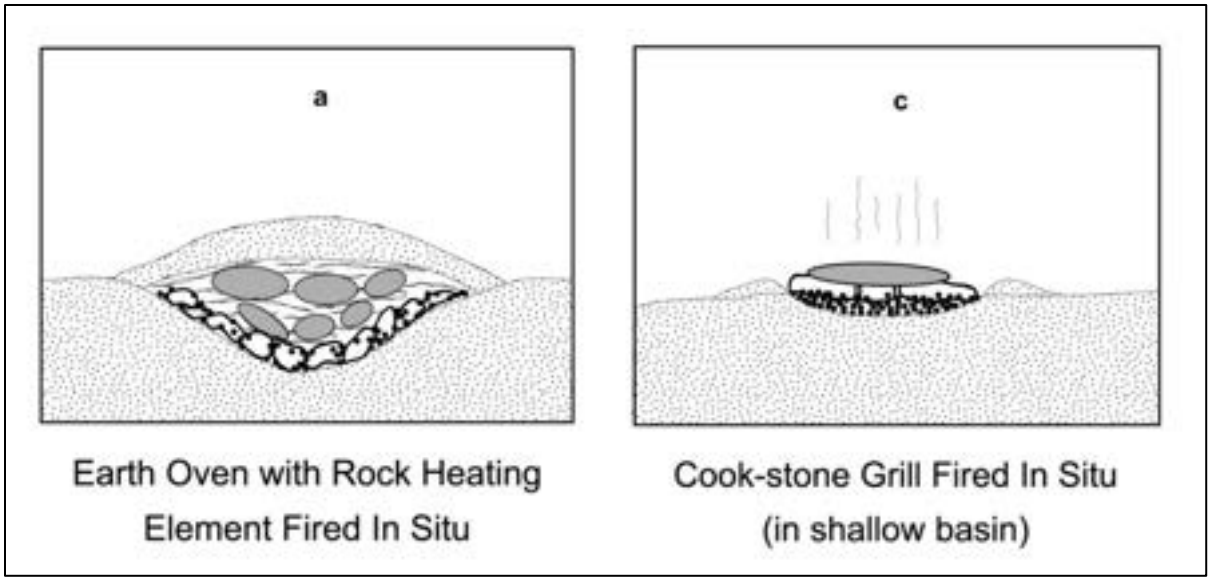


Figure 15. Representations of hot-rock cooking facilities; Earth oven and cook-stone grill (adapted from Thomas et al. 2018).

With minimal soil disturbance apparent around the cooking griddle, this arrangement may prospectively define a living surface situated at around 50-65 cm depth.

The direct association of the SMH lithics to the dated thermal feature secures a new date range of the SMH point type at approximately 10,250 BP. Additionally, the close proximity of SMH specimens to the dated bison bone also gives an additional fairly secure second new date range around 10,500 BP.

Previous proposed dates for the SMH point type have been much later than these results at 8,700-9,990 BP (Dial et al. 1998), or not in totally secure context (Hester 2017).

Additionally, the secure dating of a well-preserved thermal feature in the Paleoindian period adds unique data to the study of lifeways in these ancient times.

Test Unit Block 2

Figure 16 illustrates a proposed progression of earth oven constructions and cooking events over an unknown period of time. Mapping the depths and proportions of apparently consolidated heating elements, along with associated FCR scatter, we propose at least 3 sequences of cooking events evident within the current excavated units.

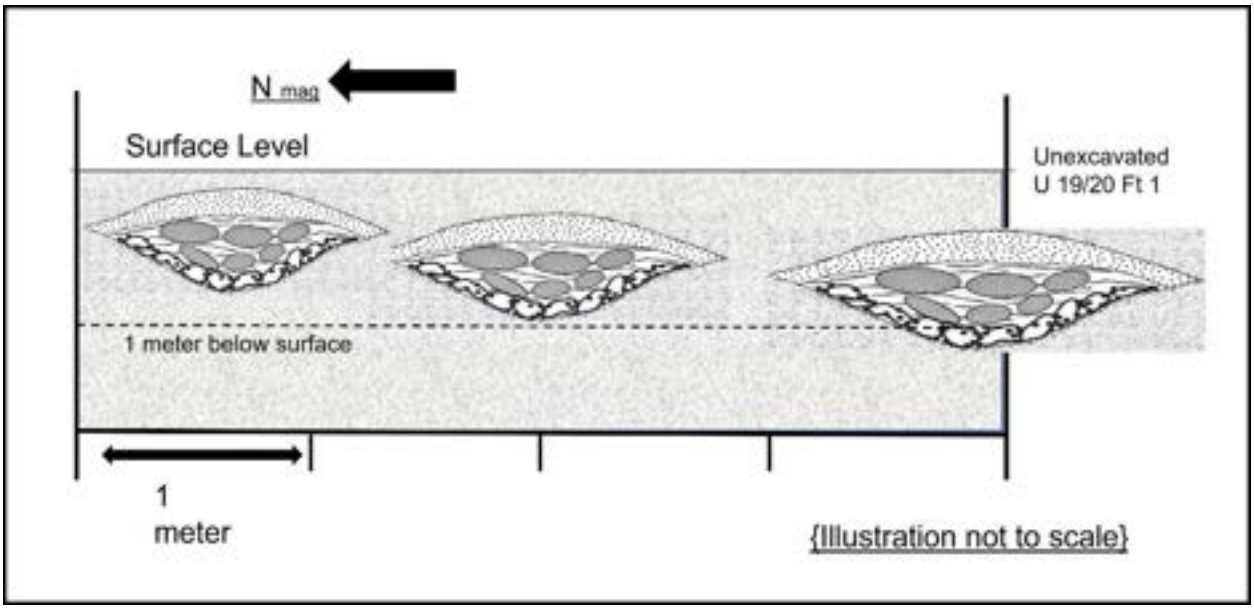


Figure 16. Block 2, representations of placements of a series of earth ovens (Adapted from Thoms et al., 2018).

Using the lowest depth of associated FCR as a guide, it appears that the partially excavated Feature 1 spanning Units 19 and 20 represents the initial cooking events currently exposed in this occupation area. Current excavations have defined only about one-third of the probable proportions of this large feature; hypothetically, if this feature has the circular or ovoid shape of earth ovens found the in the Archaic Period, only the northwest one-third of its circumference has been exposed.

Additional evidence for the annular nature of the feature is seen in the pronounced depression evident in the southeast corner of the excavated portion. In comparison to similar ovens found in Archaic sites, such central depressions are the remnants of the locations within the oven structure where the food packets were placed upon the heating elements, then covered with vegetal insulation and soil for cooking. The removal of such overburden and food packets, along with loose FCR after cooking, creates a depression in the oven structure, as seen in our Feature 1 (Thoms et al. 2018, Black 2007, and Fig. 17).

The depth of topmost associated FCR elements is approximately 70cmbs, and the *in situ* stack appears to continue below the 1 meter level established in the adjoining excavated unit (Unit 15). Prospectively, the vertical depth of the feature appears to be more than 40cm thick, with the bottom of the consolidated rock below 1 meter. Exposure of the top layer of FCR elements of the feature shows a low amount of disturbance to the original structure of the oven, and a relatively low amount of FCR scatter in comparison to the other features.

Figure 17. Feature 1, Units 19-20, looking south, showing annular nature and central depression of the feature, top left. Photogrammetry detail by Mike McBride.

Many of the individual limestone elements appear to be laying undisturbed, fractured *in situ*, and are overall larger in size and less fractured than in the other features in this block. We suggest this is evidence that the oven was used very few times before abandonment. However, further analysis of the individual FCR elements and further excavations are ongoing, with the potential of validating or modifying such assumptions.

In comparison to Unit 19/20 Feature 1, the large remnant FCR mass centered in Unit 13 (Feature 1) began to show at approximately 30 cm and was completely gone at 95-100 cm. A broad FCR scatter was evident around the perimeter of the Unit 13 feature, prospectively, evidence of multiple cooking events. However, the overall vertical placement of the mass with a shallower top and a higher bottom, show a distinctly different series of assembly and disassembly events than in Units 19 and 20.

Defined dimensions of the FCR mass in Unit 16 are somewhat vague due to probable overlapping of FCR assembly in a continuation of cooking events from the Unit 13 feature. The shallower top at approximately 20 cm and clearly defined bottom at approximately 60 cm may be evidence of the final series of cooking events in these 2 related FCR masses.

Our future goals include the exposure and full definition of the large Feature 1 in Units 19-20. Prospectively, this is the oldest cooking feature that we have encountered, and careful progress will hopefully make clear the structure's assembly and cooking applications. We have recovered preliminary charcoal samples, and are confident that there is an abundance more as we explore the more undisturbed parts of the structure, thereby leading to radiocarbon dating.

Questions of Stratigraphy

Combined with the new radiocarbon date for the bison bone, the new radiocarbon date from Unit 14 Feature 1 adds valuable new data to the context of the St. Mary's Hall point type and manufacturing technology. Additionally, the date's source of an intact cooking hearth (although not an earth oven) does complement our goal of research and analysis of an exceptional example of some of the earliest earth oven technology known in our region.

Perhaps more broadly, our comprehension of this part of the site and the value that it holds has become greatly enhanced. The combination of the 3 secure dates in the Middle to Late Paleoindian Period, along with a growing assemblage of diagnostic Paleoindian period lithics, gives unequivocal proof of the temporal context of the occupations. Additionally, when considering the stratigraphy of this entire Pleistocene Terrace, we theorize that most remnants of any previous Archaic Period occupation sediments has been scoured away by river flooding and erosion by a river flood chute which developed approximately 1000 years before present, and whose morphology is easily visible today (Stoutamire et al. 2021).

Hence, we propose that the shallowest Paleo Area levels of excavations (theoretically) begin early in the Early Archaic period and progress rapidly into Paleoindian period context. The question of stratigraphy has become more imperative upon our increased understanding of the rarity of our working environment, and the care that must be applied; that is, *all* work done in levels below 20-30 cm is being done in ever-deepening deposits of Paleo sediments.

Additionally, we recognize that, although there is good evidence that these deposits are of Paleo period age, there is much evidence of disturbed stratigraphy within these sediments.

In an analysis of the Block 1 lithic assemblage, an immediate anomaly is that the Angostura base was recovered at 7 cm, above the most recent (youngest) diagnostic point, an Early Triangular Point, dating to the Early Archaic, ~5800-4800 BP, also recovered in a shallow level in Unit 9 at 33 cm depth. Additionally, several SMH specimens were recovered at depths similar to the Early Triangular depth, i.e., 30-39 cm.

However, most of the SMH points were found below these depths, and we note the relatively close grouping of SMH in the center of the block in direct associations with dated bone and charcoal.

We propose that some of Block 1 stratigraphy might be relatively undisturbed, and the position of the younger Early Triangular and Angostura points above the majority of SMH depths, plus the lack of any other later/younger point types, may give support for this view.

The recovery of the Angostura/Uvalde/Golondrina (A/U/G) grouping found in Unit 20, and the recovery of the Dalton base at the deepest level of Unit 16, along with the absence of any younger point types found in Block 2, or found anywhere on the surface around the 2 blocks, would seem to give further support to the argument.

Understanding the disruptive processes that earth oven cooking, i.e., assembling, disassembling, digging, trampling, etc., has on the surrounding surface and subsurface soil integrity must give pause when considering the recovery and interpretation of associated artifacts and features. This is especially true in the environment that we see in Block 2, with multiple events, wide FCR scatters found throughout the block, and repetitious disturbance and churning of the surrounding soil.

The review of the Block 2 lithic assemblage in only partially useful is these questions. The Early Archaic is represented by the Uvalde point, and as noted above, no younger periods are represented. The transition to Late Paleo is represented by the Angostura and Golondrina points, and SMH and Dalton are Paleo Period.

However, the SMH pieces are found at most levels from shallow to deepest, and not grouped. And, although the Dalton base is at an expected deep level, several SMH points were found above the A/U/G group. Thus, the sediments in the excavated areas around the oven structures would seem not to present reliable measures of stratigraphic integrity.

Significance of Earth Oven Cooking Facilities Within Paleoindian Levels

In an effort to compare Paleoindian period sites in South Central Texas with earth oven features contemporaneous with those found at CWR, a brief survey of literature from three sites was done: Kincaid Rockshelter (41UV2), Wilson-Leonard (41WM235), and Pavo Real (41BX52). What was learned from this survey was that most evidence of any cooking features from occupations ca. 12000-9000 BP, if indeed present, was lost over time to erosion, floods, or other natural events. Further, no clear evidence of earth oven facilities of Paleoindian Period age is found in the reports.

The Kincaid Rockshelter in Uvalde County is made up of six stratigraphic zones, with the lower four (Zones 1-4) being of Pleistocene age, and the upper two of Holocene deposits (Collins et al. 1989). What evidence of the presence of hearths—warming and cooking—is in Zones 5 and 6, above the Paleoindian levels.

The remains of modern animals, along with the detritus of the previous Archaic inhabitants—determined by diagnostic materials recovered—were found amid the ash and silt making up Zone 5, as well as fire cracked rock and burned bone fragments. Sedimentary deposits in Zone 6 included charcoal, ashy dust, and burned rock, as well as cultural items from the Archaic, Late Prehistoric and historic periods (see Black 2005, Collins 1995, and Collins et al. 1989). However, evidence of earth oven use is not reported in the literature.

Pavo Real is a multi-component site (Collins et al. 2003) in Bexar County with Paleoindian and archaic components, most of which were excavated before being entombed in concrete as part of the construction of a major highway skirting San Antonio (Figueroa and Frederick 2008). It was an area prone to repeated flooding during Paleoindian occupation times (Collins et al. 2003), which may be a factor in the lack of evidence of any sort of cooking features in the area of Paleoindian occupations. Additionally, having been subject to erosion for several thousand years, what would have remained of the Clovis camps would have been lost long ago (Black 2003).

Small charcoal fragments from the site's extensive burned rock middens yielded Early Archaic times (Collins et al. 2003). Archeological testing performed at the site yielded burned rock that "was not clustered nor associated with charcoal or soil discoloration that might be indicative of a feature" (Figueroa and Frederick 2008).

Collins raises the possibility of a hearth in the Early Paleoindian (12000 BP-10600 BP) Bone Bed Component at Wilson-Leonard (Collins 1998a), in association with a collection of bison bone fragments and lithic artifacts. Evidence supporting this conjecture include the "non-random" placement of discolored rocks, the cause of whose discoloration cannot be determined. Additionally, evidence of terminal reduction of bifaces, as well as other tasks requiring the stone tools recovered in the bone bed, in an area of the excavated tract could likely have been a domestic area, which "may have included a hearth." (Collins 1998a).

Among the thirty-nine burned rock features recovered from the Late Paleoindian (9990 BP-9530 BP) component of the Wilson-Leonard site (Bousman 1998), a number of them were burned rock rings, and an even greater number were burned rock clusters. The count also includes two pits which may have been used to boil stones or for storage, the latter of which must be considered, given that there was no evidence of burning (Bousman 1998). Bousman does not discuss these features as cooking hearths *per se*, but rather as "intact heated-and-cooled-in-place burned rock features [whose] use is very difficult to decipher." (Bousman 1998:197). Nor did the evidence clearly support recovered burned soil and rocks as coming from cooking hearths. However, note was made of an increase in rock count and feature size from one unit to the next, suggesting evolving notions regarding burned rock features (Bousman 1998).

Collins (1998b:289) summarizes the advent and transition of earth oven cooking in Central Texas; "Extensive, intensive, and widespread use of heated-rock cooking technology began by 8800 to 8500 B.P. in Central Texas and reflects important changes in food processing. This change marks the beginning of the Archaic and, basically, centers on the use of large earth ovens."
Our current research presents the opportunity to develop the reliable Paleoindian Period dating on well-defined earth oven facilities that appears to be rarely found in the archeological record for Central Texas.

Moving forward with the feature excavations, it will be most important to recover in situ thermal elements with adhering or closely associated charcoal and bone or other organic material recovered in verifiable context. The resulting radiocarbon dating will be the most reliable measure of temporal context and stratigraphy.

SUMMARY

Site 41KR754 presents abundant evidence that makes it unique to Central Texas archeology. The site was occupied periodically for more than 11,000 years by semi-nomadic indigenous peoples who left ample testimony about their lives and lifeways. Our 4 years of ongoing work has recovered and documented prehistoric trade items, a comprehensive assemblage of diagnostic stone tools, and extensive evidence of food resources (both plant and animal) and cooking facilities in all occupation events.

Since our last report in 2021, we have made great progress in uncovering new artifacts, features and other data, and broadened our understanding of the ancient peoples' lives and survival.

This report focuses on the evidence of the arrival and area occupation of some of the earliest aboriginal peoples of the Early Holocene Period. We have secured the best prospective dating for the St. Mary's Hall point type in the archeological record. And in particular, evidence of the very early development of systematic plant cooking technology in Central Texas.

Block 2 excavations have demonstrated the presence of multiple earth oven cooking events, but no reliably datable results have been produced. However, the secure associations with Paleoindian Period lithics, as well as the general stratigraphic association with Block 1, are the initial anchors with which to build our evidence as we continue our research.

[**Authors' Note:** During ongoing excavations in Block 2 at the deadline time of this writing, new Unit 22 was begun. Unit 22 is a 2x2 meter square directly above the southwestern quadrant of the large Feature 1 earth oven in Units 19-20 and adjacent to the south walls of both units. Within Level 1 (0-10cm below surface level), a FCR feature, approximately 115x175cm was excavated,

designated Unit 22 Feature 1. This feature is a relatively small, shallow hearth with a minor FCR scatter in the exposed unit boundaries, not giving the appearance of a typical earth oven. Within the stratigraphy of Block 2, this feature is approximately 50cm above Feature 1, with no apparent association to Feature 1 or any other feature, and literally just below the current surface of the highest point of the Paleo Area. Significantly, a partially fractured Martindale point, as well as 2 nearly complete Bandy points, were recovered from within the FCR matrix of the hearth. The recovery of these Early Archaic points, with respective date ranges of 6440-5040 BP and ca 8,000-6,000 BP (Turner et al. 2011: 132), offers new data for the temporal context of the Paleo Area. This data will be further documented and analyzed in our future reports.]

ACKNOWLEDGEMENTS

We wish to thank the landowners of the Crying Woman Ranch site, Mike and Sandy Hightower, for their enthusiastic and unwavering support, and for graciously allowing HCAA to continue our investigations on this unique site.

Since the summer of 2021, the site has been visited by our colleagues Steve Black, Charles Frederick, Gus Costa, Chris Lintz, Robert Lassen, Tiffany Osborn, Sergio Ayala, David Calame, and other very knowledgeable colleagues. All have offered very useful critiques, guidance, and support; and all their friendship and interest is very much appreciated.

Dr. Leslie Bush is very much appreciated for her excellent and timely analysis of our organic material, and prep work done on our charcoal samples.

Dr. Jon Lohse has been our liaison with the Penn State AMS Lab, and facilitated the analysis and reporting of our radiocarbon dating. Many thanks.

Dr. Mary Prendergast's identification of the Paleo bison material is also invaluable and much appreciated.

We also thank Dr. Thomas Hester for his ongoing friendship and availability for questions in all matters of lithics.

And many thanks to John Benedict for his assistance in reviewing and editing the manuscript, and editing this volume of Ancient Echoes.

Finally, we recognize and sincerely thank Steve Stoutamire for his leadership and expertise, and the following HCAA members who have participated in field and lab work over the four years that work has continued at CWR, and who have provided valuable time and effort toward the success of this project: Rick Barrier, Bonnie Bonnet, Joe Braley, Susan Clark, Carolyn Dreyer, Renee Dunlap, Terry Farley, Kay Woodward, John Forister, Marvin Gohlke, Jr., Craig Mangham, Bill Matthews, Karen Moritz, Dan Osborn, David Park, Ward Preston, Ed Rendon, Steve Stoutamire, Dick Tomlinson, Trudy Eberhardt, Ronnie Pue, Dawn Caballero, Diane Dismukes, Dr. Don Priour, Laura Urbis and John Benedict. We apologize if we have left anyone off this list.

ATTACHMENTS

Attachment 1

Beta Analytic C14 age data for burned *Bison antiquus* bone associated with an in situ Saint Mary's Hall Point, Unit 9, 41KR754, 2020.

BetaCal 3.21

Calibration of Radiocarbon Age to Calendar Years

(High Probability Density Range Method (HPD): INTCAL13)

(Variables: d13C = -9.9 o/oo)

Laboratory number **Beta-555186**

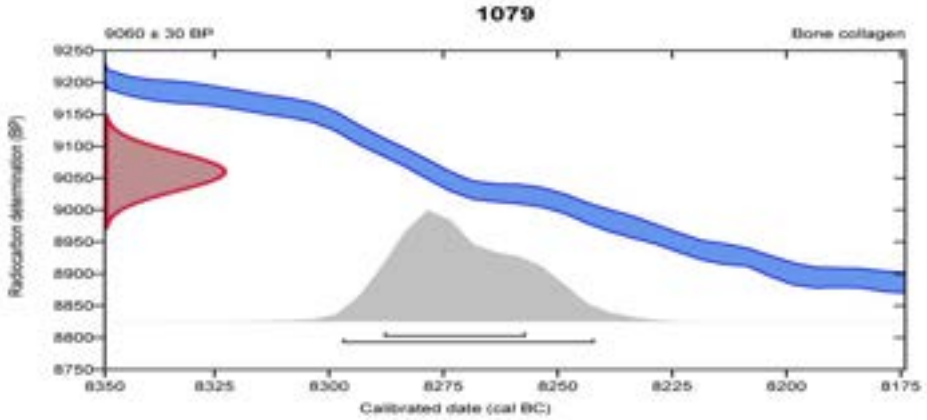
Conventional radiocarbon age **9060 ± 30 BP**

95.4% probability

(95.4%) 8299 - 8244 cal BC (10248 - 10193 cal BP)

68.2% probability

(68.2%) 8290 - 8259 cal BC (10239 - 10208 cal BP)



Database used

INTCAL13

References

References to Probability Method

Bronk Ramsey, C. (2009). Bayesian analysis of radiocarbon dates. Radiocarbon, 51(1), 337-360.

References to Database INTCAL13

Reimer, et al., 2013, Radiocarbon55(4).

Beta Analytic Radiocarbon Dating Laboratory

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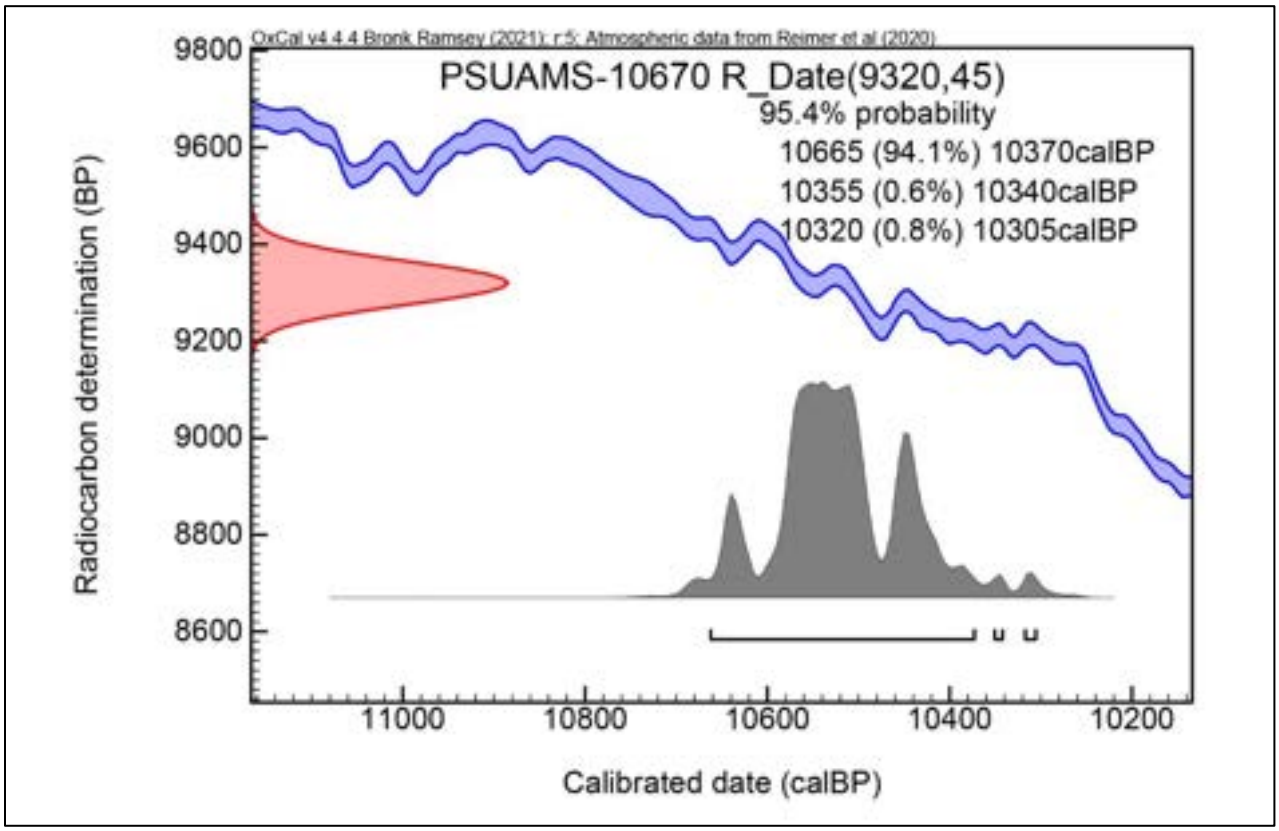
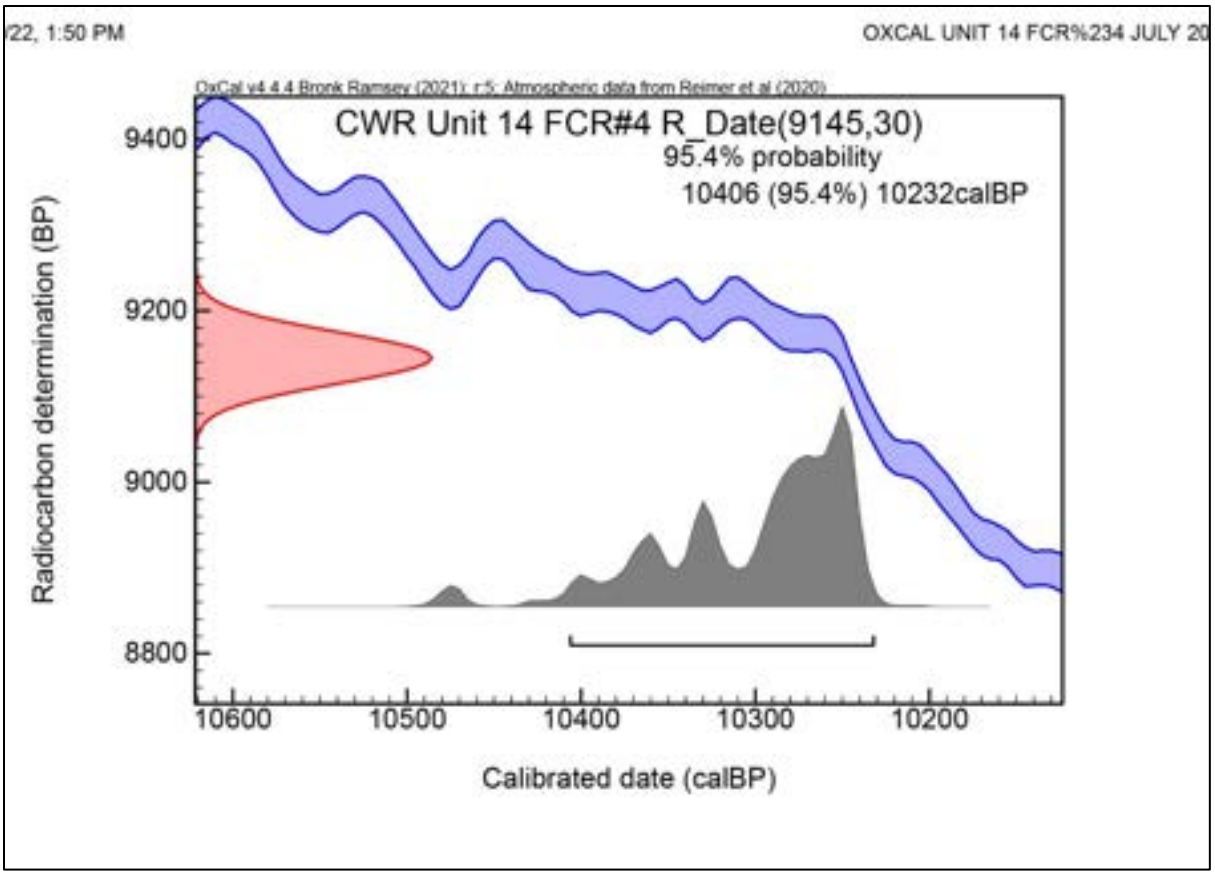
Attachment 2

Radiocarbon dating report for *Bison antiquus* bone from Unit 9, March 2022



Attachment 3

Radiocarbon dating report for charcoal from Unit 14 Feature 1, July 2022



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St. Mary's Hall Lanceolates from 41KR754[1]

Sergio J. Ayala

Introduction

Excavations in 1977 in Bexar County, Texas, revealed a component of distinctive points. Additional data recovery in the late 1990's at the Wilson-Leonard site in Williamson County uncovered similar points (Collins and Headrick 1998). This ancient, Late Paleoindian lanceolate technology is referred to as St. Mary's Hall (SMH). The points/knives are best described as a parallel-sided lanceolate point with parallel-oblique flaking (Turner et al. 2011), concave based, heavily ground in the haft area, and with a proposed date range of 11,600–9700 BP (Bousman 2004). At the Wilson Leonard site, SMH points followed the Wilson component, and were closely associated with Golondrina, Barber, Angostura, and specific utilitarian tools. "A few notched stones, possibly net sinkers or bolas, occur with these forms as do a variety of bifacial and unifacial chipped stone tools and a few manos." (Collins 1998: 281-282) Consequently, this has led to an interpretation that there may be a kind of technological continuity along the sequence of unfluted, late Paleoindian lanceolate technologies. Recent site investigations at 41KR754 afford Texas archaeological science the opportunity to clarify some of the blind spots surrounding these unfluted technologies, particularly with SMH lanceolate technological behaviors. These clarifications will better place SMH lanceolate technology in an improved cultural and ecological framework.

Generalized Technological Overview

Morphologically, SMH is narrower than many other Paleoindian lanceolates, have distinct longitudinal biconvex cross-sections, and their makers intentionally crafted these points to hold most of their mass in the middle of their blade bodies (Figure 1.). Their widths average near 20 mm, thickness near 6 mm, and length for intact specimens near 8.5 cm. In cross-section their thin bodies are slightly biconvex. Technologically, the SMH manufacturing strategy requires a cluster of advanced stone working knowledge and skills, both in thinning and shaping. Because successful shaping and contouring of these lanceolates involves specific manners of spacing and sequencing to remove parallel-oblique flakes, the strategy requires several main components:

1. Either a higher investment in selecting better quality cherts or may require thermal alteration of medium grade cherts. Thermal alteration should be a consideration when reviewing assemblages associated with SMH points (inferior quality chert will significantly reduce the success of the type of pressure and leverage-pressure flaking applied in their middle and late phase flaking sequences).

[1] Part 1 of 2.

2. This point technology is likely based upon the production of large spalls/flakes, and in some cases prismatic blades, meaning that large nodules or tabular pieces of chert would serve as core material. Small nodules of chert would serve well, but some specimens have a plano-convex shape indicating an origin from a large flake. Thus, we should look for such materials at a SMH site or within such a component.

3. SMH tool kit implements likely involved large hammerstones for core-flake reduction, and smaller hammerstones and/or billets to prepare the spalls for the preforming process. I suspect that the biface reduction process was sequenced from direct percussion to indirect percussion, indirect percussion being used in the late phase thinning sequences. Though this is a working hypothesis, the narrowness and thinness of these points are highly susceptible to bend snaps from direct percussion forces and higher rates of error. Indirect percussion procedures can reduce this significantly, all the while providing greater ease in crafting the proper spacing of oblique thinning flakes. Thus, should any tool implements remain in place and/or survive the 10,000 years of burial, I would suspect we would discover a suite of pressure, leveraged pressure, direct percussion stones, and indirect percussion implements in a SMH site.

4. The edge-treatment for SMH is a key part of the successful parallel-oblique flake removal patterns common for the technology. To be successful, middle phase thinning procedures should already begin the strategic spacing of bold, oblique flake removals. The result of this process leaves behind small deltas on the margins, which separate the negative spaces from each platform. These deltas then serve the flint knapper as the next phase's platform areas. These deltas are then force-loaded with pressure or leveraged pressure and guiding the flake removals along the arrises. These signatures are evident in some specimens in this assemblage.

From an experimentalist's perspective, archaeological explanations of point technologies and their reduction strategies, rarely discuss the importance of support-processes during manufacturing sequences. In other words, whether it is the use of leg support or leather support in the hand that is holding the preform, the type and manner of controlling the support in a precise way is paramount in many advanced technologies such as SMH. In the case of the parallel-oblique flaking, even the wrong implementation (where and how the fingers are placed) of a hard leather support can cause errors in the flaking terminations. In the case of SMH experiments at the Texas Archaeological Research Laboratory, soft leather support best allows the energy transference of the oblique-directed force-loads to release the desired oblique feather

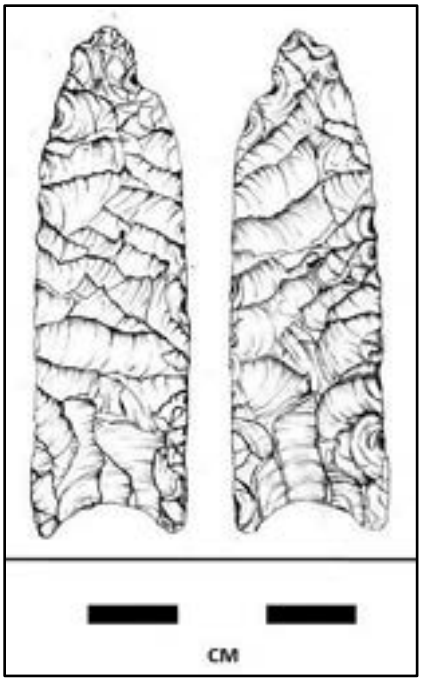

Figure 1. St. Marys Hall point from 41KR754, illustration by Sergio J. Ayala

terminations beyond the midline. Hard leather or sturdy material often reduces the pulse-wave propagation, which causes unwanted flake lengths and step-fractures. The exception to this is the use of thick, hard-leather that is has cut or slotted gap where the flake removal releases from the preform. In the latter, no leather is making contact along the arris or location where the flake is being removed/released. Nonetheless, the above mentioned 4 key components will be expanded upon with future experimental work, further observational analysis, and advanced morphological metric studies.

Expanding Our Perspectives

In part 2 of this SMH technological review, which will be published in the next edition, the technological analyses incorporate experimental archaeology. Methodologically, this study is founded upon behavioral, cognitive, and technological perspectives and anthropological theory. A comprehensive mapping of the flintknapping behaviors for SMH technology is completed, involving the documentation of four key behavioral modes (Ayala 2021): 1. Strategy 2. Tool Implement Techniques 3. Edge Treatment behaviors (platform production, edge grinding, edge beveling, etc.) 4. Flake Patterning and Sequencing.

These four behavioral modes are described as follows: *Strategy* - whether ancient stone tool manufacturing requires a simple or complex design outcome or form, abstract developments and planning is required to achieve those goals. In the context of dart point manufacture, significant knowledge and planning related to source stone acquisition, types of core reduction strategies and techniques, thermal alteration knowledge and skills, and the types of flaking techniques is required. These cognitive and psychophysical steps are placed under the behavioral mode of strategy by the author. *Tool Implement Techniques* - the intellectual and physical actions to manually control the fracturing of stone requires the aid of tool implements. How these tool implements are leveraged to achieve the strategic goals of a lithic technology require a cultural context in which a system and tradition of craft knowledge can be passed on from human to human. Nonetheless, the performance of tool implements is referred to as tool implement techniques by the author. This involves the potential use of mineral stone hammers, large mammal antler hammers (billets), force-loading flakers (pressure flakers), and several types of indirect percussion and notching implements. *Edge Treatment* - an essential component of learning and achieving advanced stone tool manufacturing involves specialized knowledge, skill, and experience in preparing surfaces and edges prior to tactical percussion or pressure flaking procedures. Without the advanced methods and procedures to control the kinds of required flake removals, a methodical and systematic reduction strategy cannot be achieved. Most often, the two primary ways to prepare an edge are to construct platforms or bevel a portion of an edge to set up favorable force-load angles that will result in specific pulse-wave propagation through the stone, which detaches and releases a flake from the parent material in a specific direction and with specific morphological intention and projections. The behavioral process of setting up edges for flake removal steps is referred to as edge treatment by the author. *Flake Patterning and Sequencing* - advanced stone tools such as

projectile points and hafted knives require advanced knowledge and skill in source stone thinning procedures. This often includes predetermined domains where specific flake removals will occur. The cognitive process and practice to do this is not linear. Like sculpture or advanced chess play, it is constellational thinking in the sense that it involves the projection of specialized steps (strategy, techniques and actions) in three dimensions and involves many abstractly formed maneuvers. Thus, the orderly process in these behaviors is referred to as sequencing by the author. The results of sequencing and the application of specific techniques leave behind flake scar signatures in particular patterning. This is referred to as flake patterning by the author.

To complete SMH lanceolate technology, the above four behavioral modes require many behavioral tasks that need to be performed with a high degree of knowledge and skill. Consequently, a tradition of knowledge, skill, and societal meaning must be transmitted and developed over years for technologies similar to these points to have continuity over generations. Unpacking this a little further is useful. Just as structures (typology, sequencing, etc.) in language relate to underlying "schemata," as discussed by linguists Fillmore (1976, 1979, 1979) and Chaffe (1973; 1977), there are relationships and structures within specialized flintknapping and their underlaying strategies (schemata). Therefore, I posit that SMH flint knappers, like many other complex ancient flaked stone technologies, could not develop, practice, and master their craft without being enmeshed in a cultural context, without having already existing "schemata" that permeated their conceptual world. It should be self-evident that culture is the basis to relate to the universe or reality. Therefore, in the process of complex flint knapping we can comprehend that existent, culturally based concepts, and feelings operate in a feedback loop with sensory stimuli and formational concepts. Within this loop conceptual relationships form and reform ways of perceiving, but the structures that appear from the stone crafting methods always maintain relationships to underlying schemata and cultural knowledge. From an anthropological view there is merit in recalling the work of Geertz. Geertz believed that the data of anthropological writing was "really our own constructions of other people's constructions of what they and their compatriots are up to (Geertz 1973:9)." Consequently, the performed analyses and reporting for SMH technology is intended to be a technological 'thick description' (Ponterotto 2006). The experiments undertaken at the Texas Archaeological Research Laboratory at the University of Texas at Austin (between April and November of 2022) by the author can be viewed as modern constructions of ancient constructions for the purposes of creating a quasi-thick description of technological continuums, which assists in the mapping of SMH lanceolate chipped stone behaviors.

Experimental Archaeology at the Texas Archeological Research Laboratory (TARL)

Fred Valdez, the Director of TARL, has provided the author with considerable space to conduct controlled experiments in the TARL facilities. Current experiments at TARL by the author include several kinds of material, some easier to flake than others. Pedernales, Georgetown, and South Llano River cherts (Edwards Formation Cherts), along with dacite from Oregon. It may

seem unwise to use dacite since this is not a material available to SMH flint knappers. However, there is an experimental *learning curve* in performing specialized, ancient techniques in this technology, which the author finds easier to practice on materials with less tensile strength than most cherts. For this reason, dacite is used to ramp up specific skills leading to accomplishing SMH technique sets. Nonetheless, examples on all source stone material have been completed.

Since thermal altering stone is hypothesized to be incorporated into the SMH reduction strategy by the author, thermal alteration of spalls and preforms were performed at TARL, followed by complete dart point production by the author. Some cherts were heated in a sand matrix to evenly distribute heat and will involve the testing of several peak temperatures between 120°C, 150°C, and 175°C. The comparative studies between thermally altered and non-heated cherts are aimed to investigate differences in the performance of the specialized parallel-oblique flaking patterning observed in SMH points, and to compare potential differences in the pulse-wave ripples within the flake scars. Thus, the author hopes to affirm or disaffirm the use of thermal alteration in the SMH technological reduction strategy.

Conclusion

At the Wilson Leonard site, SMH points followed the Wilson component, and were closely associated with Golondrina, Barber, Angostura, and specific utilitarian tools. "A few notched stones, possibly net sinkers or bolas, occur with these forms as do a variety of bifacial and unifacial chipped stone tools and a few manos." (Collins 1998:281-282) Consequently, this has led to an interpretation that there may be a kind of technological continuity along the sequence of unfluted, late Paleoindian lanceolate technologies. Recent site investigations at 41KR754 afford Texas archaeological science the opportunity to clarify some of the blind spots surrounding these unfluted technologies, particularly with SMH lanceolate technological behaviors. These clarifications will better place SMH lanceolate technology in an improved cultural, environmental, and temporal framework. The observational analysis and experimental archaeology conducted at the TARL is helping expand our technological understanding and providing a behavioral window into the SMH lifeways. This short overview represents part I of II. Part II will demonstrate the various analyses performed and a comprehensive technological placement SMH points in a spatial, temporal, technological, and ecological framework.

Acknowledgements

I would like to thank the HCAA for its long and close relationship with the Gault School of Archaeological Research. Over the years I have had the good fortune to develop close collaborations and friendships with Marvin Gohlke, Mike McBride, and Steve Stoutamire. I am so appreciative of their open and collaborative work, both on an organizational level and in their archaeological research. I look forward to many more years of working together. Last but not least, I send my heart-felt wishes to Marvin's improving health and hope he is back into his passionate archaeological investigations. You are a brother of mine, Marvin. Always.

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Which Indian Tribes Made the Archeological Sites We Find in the Texas Hill Country?

John Benedict

INTRODUCTION

This is a great question and one I commonly hear from landowners when investigating sites on their property. The simple answer is, **we do not know** which tribes made the prehistoric sites we find (Collins 2004, p. 11; Hester 1980, p. 38)! We do know it was not the Apache or Comanche Indians.

There are several reasons we do not know who created these prehistoric archeological sites. First, we have no written history going back 12,000 years because the Indians of Texas had no written language we know of. The first written information about any tribes in the Americas was penned by the Spanish beginning with the Christopher Columbus expedition in 1492 when they discovered the New World. The French joined in recording the indigenous Indian peoples of eastern Texas about 1650.

Second, this is a huge span of time from 10,000 BC to 1,492 AD—almost 12,000 years! A lot happened culturally across the world during this time. Recall the rise of the Egyptian Empire and first pyramids about 5,000 years ago, the Babylonian Empire ca. 4.300 years ago, the Chinese Empire/Dynastes ca. 3,300 years ago, the Greek Empire maybe 2,600 years ago, the Roman Empire ca. 2,400 years ago, the Inca Empire ca. 800 years ago and the Aztec Empire ca.

Figure 1. The many prehistoric Indian tribes of south and central Texas are generally called "Coahuiltecans" to denote the geographic area and the tribes inhabitating this area rather than a single tribe. Image source Texas Beyond History, https://www.texasbeyondhistory.net/st-plains/peoples/coahuiltecans.html

600 years ago. These empires loosely united many tribes/peoples under one governing body. Think about what you know of these empires and peoples, their wars, political changes, and geographic movements in Europe, Britain, Middle East, China and the Americas.

These empires were the conquerors in many wars, and they assimilated many different tribes/peoples, one way or another, into their culture. I think we can assume a lot happened culturally in Texas during this time too.

What is common to man is migration, famine, wars, and disease—resulting in an intermittent flow of peoples and cultures—thru time they mix genetically, move geographically and change culturally. Any of you that have had your DNA analyzed likely found you are a mixture of at least 3 or more cultures/races from across the globe. According to Ancestry.com my DNA shows evidence of at least 9 different cultures, I bet yours is complicated too!

My point is that during the 12,000 plus years that indigenous peoples have lived in the new world they likely have migrated, wared with each other, and assimilated each other to some extent. Assimilation occurs most commonly thru slavery, adoption, warfare, agreement, and/or intermarriage. It is rapidly occurring around the world today.

Common to most bands, tribes, and peoples is their propensity to engage in competition for land and resources! This competition typically manifests in some form of warfare and dominance of one group over another, or by agreement. The archeological and historical records are ripe with Texas Indian tribes waring with each other—raiding the enemy was a way to prove your status as a warrior among many tribes. Tribes wared over things like hunting grounds, social issues, status, revenge, food resources, and water—bottom line the need or just desire for food, space to live in, and things of value. Each culture has things they value, be they spiritual or precious metals or power or status. I suggest the prehistoric Indians of Central Texas were no different.

DISCUSSION OF TRIBES OF CENTRAL TEXAS

We can examine the tribes found here in central and south Texas during historic times when the Spanish and French first arrived here. They are generally lumped together and called "Coahuiltecans" (Fig. 1) (Kenmotsu 2022). Archeologists have attempted to relate recent archeological sites in the Hill Country to some of these tribes, however the result is vague, and experts frequently disagree.

Why is this vague if we have historic records? Sadly, by the time Europeans began settling the Hill Country in the early 1800's diseases, warfare with Europeans, Spanish attempts at missionization, conversion and enslavement, and Apache and Comanche raids had already displaced, mixed and decimated most of the earlier tribes that likely created the more recent archeology sites we find in the Hill Country—the sites of the last 1000 years (Newcomb 1993).

Most camp sites of the last 5000 years in the hill country and across much of Texas contain large deposits (middens) of fire cracked rock, ash, and bone and stone artifacts (Fig. 2), commonly called "Indian Mounds." These burned rock midden features are the result of Indian bands cooking, using heated rock and soil, hence the name "hot rock oven cooking." The artifacts at these sites were laid down in layers thru time, like layers in a cake, with the oldest on the bottom and most recent layer on the top.

Around many of these hot rock cooking ovens the Indians gathered to eat, sleep, raise children, make tools and weapons, and engage in the social activities of everyday life—this was "home" as far as we can tell. These burned rock midden campsites were usually placed near

sources of water, wood for fires, and food resources. Most importantly these same camp sites with burned rock middens were used over and over for thousands of years, many were used for more than 6,000 years and they are frequently on top of older living surfaces that go back 10,000 years. There are thousands of these burned rock middens sites in central and south Texas. Some of these burned rock midden camp sites are huge, with rock and ash accumulations that are more than 10 feet thick and cover several acres. These larger sites likely represent a small village of maybe 150 interrelated individuals—maybe winter campsites or trade fairs or gatherings for other spiritual or social events.

My point in presenting this burned rock midden site information is that Indian band knowledge of the location of these thousands of camp sites and the band's repeated use thru many generations over perhaps 10,000 or more years, suggests that the earliest Indian immigrants and their descendants may have been here for this entire time period, 12,000 years, and their life ways changed little during this time. But we do not know this.

Figure 2. This burned rock midden consists of wood ash, soil, food residues, and the remnant limestone rock fragments formed by the heat of many cooking events over thousands of years. Photo provided by Bryant Saner.

Let's take a quick look at what we do know about the names of Central Texas tribes that were here during recorded history. When the first Europeans stepped on what would become

Texas soil, there were literally hundreds of mostly nomadic tribes and bands[1] living here in Texas (Foster 2008, p.15; Krieger 2002; Newcomb 1993). Most bands and tribes are composed of interrelated families. These tribes had names most of us have never heard of, nor can we even pronounce them. Many languages were spoken. In Central and South Texas there were perhaps 7 different language groups and a number of dialects (Hester 1980, p. 39). This language and tribal data strongly suggest different bands/tribes of people came to Texas from different places in the world. Likely they arrived at different times.

Perhaps the first Spaniard to encounter Texas Indians was Cabeza de Vaca, he was shipwrecked on the Texas Central Texas Coast in 1528, likely near Galveston (Krieger 2002, p. 3). He and three other survivors were taken as slaves by a coastal Indian band. He spent 6 years among Texas Indians and finally walked to Mexico to rejoin the Spanish. For two years he was a slave and for four years he was a trader among the Indian tribes that lived near the coast south of Galveston, also inland likely not far from the eastern edge of the Edwards Plateau, and in south Texas. The tribe he chose to live with for most of the last four years was the Charruco (Krieger 2002, 32).

The tribes Cabeza de Vaca describes, lived in the open and move frequently from one place to another where various plant and animal foods were most available. The tribes that lived along the coast and used canoes to travel from island to island or mainland, had small shelters build on some of the larger canoes in which they took shelter. However, each tribe had clear boundaries with the surrounding tribes some of whom were their enemies and with whom they raided and warred frequently. The various tribes/bands traded and interact socially. As a trader Cabeza de Vaca could move freely among all these nomadic tribes. (His autobiography of this period of his life among the Indians is a great read if you ever wondered what life among the Indians was like in the 1530's. See Krieger 2002).

As far as we know Cabeza de Vaca never visited the hill country although he likely skirted the southern Balcones Escarpment when he returned to Mexico. He met many Indian bands as a trader. Following are some of the names for tribes/bands Cabeza de Vaca said he interacted with during his 6 years on the Texas coast, inland, and when he crossed South Texas on his journey to Mexico: Acubatos, Aguenes, Atayos, Avavares, Ayacones, Camoles, Camones, Charruco, Comos, Cutalchiches, Doquenes, Guaycones, Iguaces, Malacones, Mariames, Mendica, Quevenes, Quitoles, Susoles, and Yguazes (Krieger 2002).

It is reasonable to think that during certain times of year that the south Texas Indians living near the Edwards Plateau would venture into the Hill Country for acorns, pinion nuts, pecans, walnuts, chert tool stone, bison, wild onions, prickly pear fruit, or other mineral, plant or animal resources, or to trade with or raid tribes/bands living on the Edwards Plateau. But this is all guessing. However, the material cultural of the bands living on the Edwards Plateau were very similar to those living outside the Edwards Plateau.

Tom Hester in his book on South Texas Archeology lists the names and locations in south Texas where 49-tribes/bands were encountered by all the early explorers (including Cabaza de Baca) in the 1500's to 1700's (Hester 1980, pp. 42-44). Some of these bands likely spent time in the hill country.

Maria Wade conducted the most extensive study of all historic records for contacts with Indian cultures on the Edwards Plateau between 1528 AD thru 1799 AD (Wade 2003). She felt

[1] Most tribes are composed of groups or bands of interrelated families, related by marriage and/or birth. Usually they have a common culture, e.g. religious beliefs, dress, body ornamentation and language. Tribes may also have leaders or councils of leaders. Bands may, consist of only 10 to 50 people.

confident that the culture of this time, called "Toyah", covered a large more or less circular geographic area that included all the Hill Country, the area around it, and most of south Texas (Wade 2003, p. 220). Wade records 21-tribes/bands of Indians inhabiting the Edwards Plateau area in the mid 1600's. The area was generally referred to by the Spanish as Jumano[2] lands even though it was inhabited by bands called; Ape, Arame, Arcos, Bagname, Babole, Ervipiame, Gediondo (Hutaca or Parugan), Geniocane, Gueiquesale, Jumano, Jumee, Mabibit (Bibit), Manos Ocane, Pataguache, Pinanaca, Prietas, Siano (Sana), Teaname, Tercodan (Terecodam), Tuertos, Xaeser, and Xoman (Wade 2003, p. 222).

As you can see there were many tribes/bands inhabiting the central and south Texas area when the first European explores arrived. The explorers stated that these bands moved frequently. Cabaza De Vaca states every 3 to 4 days. We know they used certain sites over and over for cooking certain types of food in soil and hot rock ovens leaving behind the burned rock midden camp sites, as discussed earlier. We can assume they moved from one of these hot rock cooking sites to the next in some seasonal cycle based on availability of food and water.

I have listed some of these Coahuiltecans tribes/bands above so you will have a sense of the difficulty in naming a single tribe that made the most recent sites found in central Texas. Also, because some of these indigenous peoples are likely descendants of earlier Indians that created the most ancient archaeological sites we find in the Hill Country. The archeological record for most of these ancient long-term camp sites with burned rock middens end by about the 1750's when the old Indian lifeways were completely disrupted.

Based on the prehistoric archeological record for sites, i. e. foods eaten, artifact assemblages and features found in south Texas sites, south of the Balcones Escarpment and in the Edwards Plateau north of the escarpment, we suggest the Indians of South and Central Texas all had somewhat similar material cultures, although they differed in dialects and languages spoken, and likely aspects their social culture. Literature suggests they dressed and ornamented their bodies differently, which is a common way for cultures to communicate to one another that they are different peoples/tribes, for example tattooing and hair style.

Until the mid-1600's the Indians of central Texas had little or no direct contact with Europeans. However they were greatly affected by: (1) tribes moving from norther Mexico into Texas to escape the Spanish enslavement for their mining and ranching interests, missionization, and disease; (2) Apache Indians mounted on horses began attacking and terrorizing tribes in west Texas, pushing them east; and (3) the French fur traders supplied tribes in the Mississippi River area with guns which allowed them to attack and terrorize Caddo and other eastern Texas tribes, pushing these tribes west on to the southern plains of Texas. Some Caddo peoples joined other tribes in this area and became the Wichita Indians—an assimilation of many remnant Indian bands. Thus, Central Texas became a refuge for the tribes/bands escaping these forces (Newcomb 1993). Keep in mind that the Apache and the Comanche never came to central Texas until the early1700's. **They are not the Indians that created the ancient archeology sites we find in the Hill Country.**

The Comanche before about 1650 AD, when they acquired horses and guns, were a part of the Shoshone nation and inhabited the plains and mountains of eastern Wyoming. Once mounted, they move south following the bison on to the plains and displacing the other tribes as they went further south. They and the Apache became bitter enemies as the Comanche moved

[2] The Spanish called several tattooed tribes "Jumano" (Newcomb 1993, p. 35). They were a Coahuiltecan group, Uto-Aztecan, thought to be from northern Mexico. Today Jumano descendants are seeking recognition as a tribe/nation by the federal government. https://en.wikipedia.org/wiki/Jumanos

on to the Texas High Plains and displace the Apache that lived there. The Apache nation is, and was, made up of many tribes/bands that are culturally related.[3] The Lipan tribe of Apache escaped to Central Texas, and other bands of Apache and the Comanche followed.

Newcomb (1993) states that the first Spanish expedition to reach the northeast corner of the Edwards Plateau occurred in 1716. They arrived at the Indian village of "Rancheria Grande", near present day Cameron and stayed for 3 days among a mixture of displaced Indian tribes numbering about 2000. These Indians were displaced from the Edwards Plateau and the surrounding area north, south and east. The Indians had banded together to defend against raiding Apache. Over the next 50-75 years the Spanish attempted to missionize them with little success.

Newcomb provides a very detailed history of these various displaced tribes, and there were many. For these Indians the 1700's was a time of suffering and chaos due to Apache raids, epidemics, strife with enemy tribes and the Spanish, missionization, new alliances, migration of new groups into the area, and consolidation of tribes, resulting in the disappearance of the smaller weaker ones. Among the tribes that survived were the Yojuane, Canohatino-Cantona, Mayeye, Ervipiame, Tonkawa (=Aguacanes), Kichai, and Wichita-Speaking Tribes. Keep in mind that each of these was an amalgamation of other tribes or bands. For example, the Wichita include Taovaya, Iscani, Tawakoni, Wichita proper, and Waco tribes/bands.

CONCLUSIONS

Records state most of the Indian tribes or bands encountered by the first explorers and missionaries in south and central Texas were small, except the Karankawa, and all used the bow and arrow. Many spoke different languages or dialects of the same language, and all used sign language to communicate. They were semi-nomadic living by hunting and gathering wild animal and plant foods as seasons and locations permitted. They also raided and traded with other bands, all of which meant they moved long distances at times.

We can say nothing with certainty about the specific names of tribes that lived here in Central Texas for the first 11,000 plus years before the first recorded tribes were visited and recorded by Europeans arriving in the 1500's. Keep in mind archeologists divide the entire archeological record of the last 12,000 years into time periods based on changes in the inhabitant's material culture, especially changes in dart and arrow point styles, tools and pottery. The recent time period from 1500's to late 1700's is what archeologist call the Historic Period, before that is the Late Prehistoric Period, 700 AD to about 1600 AD, containing the Toyah Phase (ca. 1,300 and 1,650 AD) (Kenmotsu 2022, Kenmotsu & Arnn 2012). Archeologists identify the Toyah Phase by the material culture of the Indians that lived during this time, that is by their knives, Perdiz arrow points, scrapers, pottery and lifeways. Some archeologists have suggested that a group of mixed Indian bands, general called "Jumano" created the last and most recent layer of Toyah Phase cultural material on top of some of these old prehistoric burned rock midden camp sites, but this is disputed (Collins 2003 p. 111).

Is it conceivable that these early Toyah phase Indians of Central and South Texas were, in many cases, the descendants of much earlier inhabitants of this area of Texas? Possibly even

[3] Apache tribes include the Chiricahua, Jicarilla, Lipan, Mescalero, Mimbreño, Ndendahe (Bedonkohe or Mogollon and Nednhi or Carrizaleño and Janero), Salieri, Plains (Kataka or Semat or "Kiowa-Apache") and Western Apache (Aravaipa, Pinaleño, Coyotero, Tonto). The Apache are related to the Navajo in that they speak a similar language and once were one tribe that migrated from Canada.

descendants of the inhabitants that left us the earliest sites 12,000 years ago! We do not know but Nancy Kenmotsu (2022) suggests that the unique collections of languages spoken by the "Coahuiltecans", some unrelated to any language anywhere else in the world, indicate these Indians were isolated for thousands of years in central and south Texas. I suggest just as in the historic time discussed above, different tribes made these ancient sites we excavate today in central Texas. Could these tribes in the hill country have had different social or non-material cultures, but similar material cultures? Just as today most cultures of the world use similar tools, like cell phones, but have vastly different social cultures.

As the forces of disease, servitude and attempts at their genocide by Euro-Americans and other warring tribes, the Indian remnants of the many original tribes inhabiting Texas chose several strategies to survive. They joined other tribes, or agreed to live on reservations, they traveled across the Texas borders into Mexico and Oklahoma to join other tribes living there, or simply joined the Euro-American Hispanic population, and the rural Mexican populations where **they became invisible** (Newcomb 1993). They allowed themselves to be assimilated into these other cultures. They gave up much of their native culture—today many Texas Indian descendants live in plain sight as Americans, or Mexican Americans, or Hispanic Americans, or Latinos. I know this to be a fact due to the literature and due to DNA results of Mexican American folks living in Corpus today. To survive, these remnant Indians took on the Catholic faith and adopted Spanish Christian names and European lifestyles.

Figure 3. Karankawa man and woman as depicted by Lino Sánchez y Tapia, a scientific illustrator who worked for Jean Louis Berlandier following a Mexican scientific expedition into Texas from 1828-1829. The stylized scene at the water's edge shows the use of the bow and arrow to shoot fish, a method which Berlandier witnessed at Copano Bay on the central Texas coast. Image from The Indians of Texas in 1830 by Berlandier (1969). Source: https://www.texasbeyondhistory.net/mitchell/images/Berlandier-Karankawa.html

Some of these Mexican Americans of today carry their past with them in that they possess a large amount of DNA from tribes that lived in Northern Mexico and South Texas for many hundreds, perhaps thousands of years. They also possess DNA from around the world from very different ethnic groups. This suggests "Spanish" sailors/soldiers that entered the New World after 1500 were born in many ports-of-call around the world[4]. For example, here is the DNA ethnic connections for a Mexican American male from Corpus Christi today. Keep in mind all his many relatives in south

[4] The Spanish frequently kidnapped Indian women, young males and children for various purposes (Wade 2003, p. 229).

Texas will have somewhat similar sources for their DNA: Spain (43%); Indigenous Indians Mexico (39%) of **Northeastern Mexico** and **South Texas**; Indigenous Central/South America Indians (3%), i.e. of Yucatan Peninsula, Peru, Bolivia and Ecuador; Indigenous peoples of Iberian Peninsula (10%), i.e. of Basque/Portugal, Spain, and southern France; and Indigenous peoples of Africa (3%), i. e. of Senegal, Cameroons, Congo and North Africa. Note this Mexican American person's genetic connection with South Texas tribes provided 39% of his DNA. Could he and his relatives be descendants of tribes that were here 500 years ago when the first Spaniard set foot on Texas soil?

On October 4 of last year, members of the "extinct" Karankawa Indian tribe (Fig. 3) suddenly reappeared in Corpus Christi fighting for their prehistoric burial grounds where their ancestors were buried on a sandy bluff above Corpus Christi Bay at the mouth of the Nueces River (Douglas 2021). First the Spanish in 1700 and then later other European Americans, like Stephen Austin and his colony, attempted to eradicate the 5 or so bands that made up the Karankawa tribe (Ricklis 1996, Seiter 2021). The Karankawa were originally located along the coast of Texas from Galveston south to Corpus Christi. A remnant escaped extermination by becoming part of the local Hispanic population, or by traveling to Mexico to live among the Hispanic population, or joining other tribes (Lipscomb 2022, Ricklis 1996, pp. 1-3).

In 2001 the city of San Antonio recognized the "tribe" of Tāp Pīlam Coahuiltecan Nation as First Tribal Families of San Antonio by proclamation. There are 30,000 San Antonio residents that claim Coahuiltecan ancestry as indigenous Indians with prehistoric roots in Bexar County or elsewhere in South Texas (https://www.ala.org/aboutala/indigenous-tribes-san-antonio-texas).

Here is another example of the invisible Indians becoming visible in Alpine, Texas. Recently two mummified prehistoric Indian bodies were excavated from a prehistoric cave site near Alpine, Texas (Monroe 2022). One body was 600 years old and the other 900 years old! Their DNA was analyzed, and a truly stunning thing occurred. Their DNA matched a local long-time resident of the Alpine area, Mr. Xoxi Nayapiltzin who is native American! He knew his family had lived in the area a long time and said he was "happy this confirmed his belief." Having your family live in the same location for 900 years gives a new meaning to "my family are long-time residents."

Many wonderful books have been written on the historic Indian tribes of Texas and the Hill Country. If you have a desire to learn more, I have listed them in the REFERENCES section following. In my opinion the four best sources are Foster (2008), Hester (1980), Krieger (2002), and Newcomb (1993). And also, Maria Wade's book (2003) that focuses only on the tribes thought to have lived on the Edwards Plateau during the period 1582-1799 AD.

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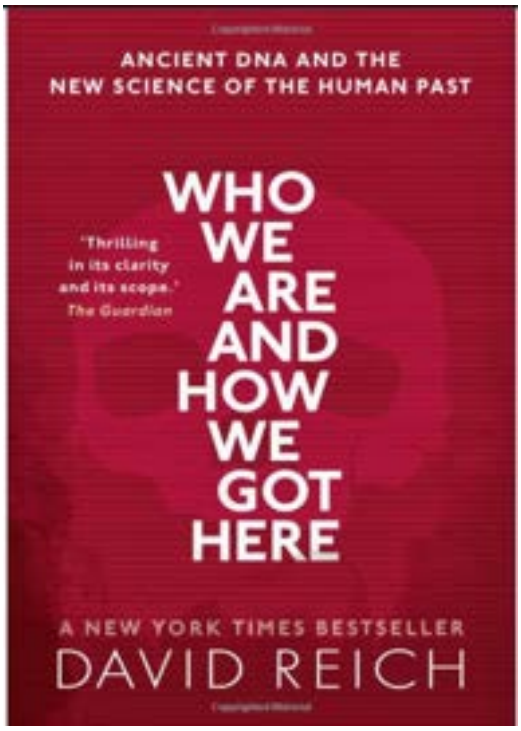
Book Review

Who We Are And How We Got Here:
Ancient DNA and The New Science Of The Human Past

Written by David Reich
Vintage Books, N.Y., 2018

Reviewed by Dan Osborn
November 2021

This book is about how new technologies in extracting and reading ancient DNA have brought about new understandings of human history. The science of examining the DNA of our earliest ancestors has blossomed exponentially since 2007 as researchers have been able to examine whole strings of DNA compared to just small amounts of genetic material. These discoveries have helped clarify how *Homo sapiens* and other *Homo* species have migrated and interbred to eventually populate the globe.



The book discusses how early human movements are followed through their genetics as our ancient ancestors traveled from Africa into the European and Indian continents as well as East Asia. Of course one of the most interesting chapters is the migration and peopling of North and South America. These newer studies of genetic blueprints in America support archaeological evidence for an early arrival of a group or groups, before the ice-free corridor opened up allowing the major migrations into America. The author refers here to the sites in Monte Verde, Chile and the Paisley Caves in Oregon, each of which have radiocarbon dating of artifacts well before these ice sheets became navigable. The author sees genetic traces of at least two very different groups that may have moved from Asia into the Americas, perhaps at different times and by different routes. Reich points out that geologists and archaeologists have shown that portions of the Northwest coastline were ice-free after about 16,000 years ago which might have allowed these earlier migrations.

Closely associated with the notion of such early entries into the Americas is another chapter that discusses what the author calls "ghost" populations, peoples who are no longer in existence but left traces of their genes in the Americas and elsewhere, genes different from the bulk of Native American DNA. Certain tribes in South America, for example, have 1-2% of their DNA related to native peoples in Australia and Melanesia (countries of Fiji, Solomon Islands, Papua New Guinea, and Vanuatu). The author explains how these groups, separated by vast stretches

of ocean, had common ancestors in Asia who may have traveled to the Americas before the primary waves of migration once the ice sheets opened.

The chapter "Encounters with Neanderthals" might be a revealing read for those interested in this topic. The author explains how he and other researchers showed conclusively that humans and Neanderthals definitely interbred. But there were some twists and unexpected findings. For example, the resulting mating would have produced hybrids. These individuals, as happens to other entities in the plant and animal kingdoms, may have a tendency towards infertility. The author's research finds, as a result, that natural selection through the millennia has been reducing the amount of Neanderthal DNA in humans. Today, the average amount of such DNA in those individuals who possess some of these ancient genes is around 2 percent. Earlier percentages were around 6 percent. So Neanderthal DNA is being depleted, not only because some resulting traits are no longer useful, but perhaps because they may influence infertility.

This book helps us see how genetics is becoming an increasingly precise tool for discovering how ancient peoples moved back and forth among the continents as well as how different populations interacted once they met each other. The results of such movements can be traced more accurately using newer methods of obtaining and reading whole sequences of the DNA of ancient peoples. And, as the author emphasizes, these tools are rapidly improving so that research findings and theories have to be continually revisited and revised.

David Reich is a professor of genetics at Harvard Medical School. He is one of the leading authorities on analyzing ancient human DNA. Of note is one of his many awards, the Dan Davis prize in Archaeology and Natural Sciences for computational discovery of intermixing behavior between Neanderthals, *H. neanderthalensis*, and *Homo sapiens*.

THE HILL COUNTRY ARCHEOLOGICAL ASSOCIATION

The Hill Country Archeological Association (HCAA) is a non-profit organization. Our main 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 recording and preservation of archeological sites, and offer proper training in archeological field and laboratory methods.

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