Houston Archeological Society

THE PROFILE

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Thursday, March 18th, 2021, at 6:30 p.m.
"The Dimond Knoll Project in Perspective: A New Path for Southeast Texas Prehistory"
Dr. Jason W. Barrett

The next monthly meeting of the Houston Archeological Society will be held on Thursday, March 18th via ZOOM**.** Dr. Jason W. Barrett, TxDOT Archeologist, will present a program highlighting the Dimond Knoll Project, a large prehistoric archeological site along Cypress Creek. Many of the HAS members who worked with Dr. Barrett for over a year on the Dimond Knoll project will be interested in the results of his extensive study of the artifacts recovered at the site. HAS members will receive a link to the ZOOM meeting shortly. The business meeting will start at 7:00 but we will open the meeting to HAS members at 6:30 to offer everyone 30 minutes to socialize. Barrett's program will begin 7:15 p.m. on Zoom and will also be livestreamed starting at 7:15 p.m. on the HAS YouTube channel at https://youtu.be/29aSAT8Vl-U.

According to Barrett, Texas archeologist DeeAnn Story once wrote that it "is not an exaggeration (or much of an exaggeration) to describe the Archaic chronologies in [Southeast Texas] as among the least well established in North America." (1990:213). A clearer understanding of the region's prehistoric importance has been reached through the Dimond Knoll project, largely due to the partnership developed between TxDOT, Coastal Environments, Inc., and the Houston Archeological Society.

Artifacts of exotic origin, or that reference extra-regional traditions, have been recorded periodically in archeological deposits across southeast Texas. Stone tools from the sites of Dimond Knoll and Smithers Lake, located in Harris and Fort Bend Counties respectively, provide clear evidence of long-distance movement of people and ideas in prehistory. Remarkably, both the Dimond Knoll and Smithers Lake sites show evidence of having been repeatedly revisited over a period of more than eleven thousand years. Included among the 1330 projectile points recorded within their combined assemblages are artifact types commonly associated with the Ohio and Mississippi River Valleys. The prominence of exotic types at both sites peaks during periods when bison are present in the region.

In his presentation Barrett proposes to show a reconstructed network of indigenous footpaths and trade trails to explain the presence of exotic material culture in Southeast Texas, relying on data collected from journals, diaries, and other records of the 17th and 18th century Spanish entradas, as well as from 19th century maps. This new research indicates that native long-distance trade trails had extraordinary time depth, integrated with riverine trade networks, and spread across vast geographic areas. He will also show several exotic projectile point types identified in the region, and also present a number of newly defined types. Barrett has provided an excellent handout to accompany this presentation that you can find on the HAS website at this link https://www.txhas.org/PDF/dimond%20knoll/HAS%202021%20-%20Dimond%20Knoll.pdf.

Jason Barrett received his Ph.D. from Texas A&M University in 2004, joining the TxDOT Environmental Affairs Division's Archeological Studies Branch the following year. For TxDOT, he is currently the managing archeologist for the data recovery excavations at Frost Town in Houston, as well as principal investigator at Dimond Knoll. He also recently directed the Texas Archeological Society's Annual Field School over three consecutive seasons in Columbus (2014 through 2016), and later served as the Society's President. Jason also volunteers as a professional advisor to the Houston Archeological Society. He has authored numerous journal articles, book chapters, and technical research reports, and has taught courses in archeology and cultural anthropology at Texas A&M University, Baylor University, Rice University, and Blinn College. Jason has lived in Texas since 1995 and in Houston since 2012, and will be moving to Toronto, Canada in April 2021.

If you have any questions about this program, please contact HAS President, Linda Gorski, at lindagorski@cs.com.

President's Message – Linda Gorski

HAS members and friends,

What a month February turned out to be. First of all, I hope everyone survived the frigid weather, power outages and loss of water. I know it was touch and go for most of us. We were without power for 3+ days here in the Montrose but thankfully had very little resultant damage. Most people in Houston did not fare as well and to those of you in that category – please let me know if there is absolutely anything I can do for you.

As you know, we had to cancel our HAS February meeting featuring Gary Pinkerton and his talk on Trammel's Trace due to rolling blackouts. I promise we will reschedule that talk as soon as possible. In the meantime, we are gearing up for our March 18th Zoom meeting, the topic of which will be familiar to many of you HAS members who worked on the Dimond Knoll project with us. Dr. Jason Barrett will present an update on Dimond Knoll and a quick overview of what will be in the report on the project. See all the details on page 1 of this newsletter. He has also provided us with a detailed handout to accompany this meeting that you can find on the HAS website at this link: https://www.txhas.org/PDF/dimond%20knoll/HAS%202021%20-%20Dimond%20Knoll.pdf. This is our last opportunity to share an evening with Dr. Barrett as he will be moving to Toronto, Canada, in April. It has been such a pleasure working with this outstanding young archeologist on projects including Dimond Knoll, Cotton Field and Frost Town. We shall miss him!

More news - I have it on reliable authority that the Texas Archeological Society has scheduled the 2021 TAS Field School for June 12 – 19 in Kerrville, Texas. You can find more information at these links:

- TAS Field School general info page: https://www.txarch.org/tas-field-school
- TAS Field School 2021 page: https://www.txarch.org/2021-field-school
- The February Travis County Archeological Society meeting featured archeologist Tiffany Osburn and others discussing this year's field school. That program is now on the Travis County Archeological Society's YouTube channel at this link: https://www.youtube.com/watch?v=txU7bOnq0Dg&t=4s

One more huge bit of archeological news – the Houston Museum of Natural Science just opened an exhibit entitled ***POMPEII: The Exhibition.*** This exhibit examines the lives of residents of Pompeii before and after the catastrophic eruption of Mount Vesuvius on August 24th, 79 A.D. Visitors to the exhibition travel back in time when Pompeii bustled as a commercial port and strategic military and trading city. In a media-rich, object-based, immersive experience, you can learn how the people of Pompeii lived, loved, worked, worshipped and found entertainment.

The special exhibition features over 150 artifacts on loan from the collection of the Naples National Archaeological Museum, including frescoes, mosaics, and statues from the sites hidden from view and forgotten for centuries until rediscovery over 250 years ago. The sudden disaster that destroyed Pompeii also preserved it and over time archaeologists have uncovered a unique record of its daily life — roads, buildings, municipal services, paintings, mosaics, artifacts, and even preserved bodies. Ongoing excavations at the site provides an ever-evolving picture of everyday life at the height of the Roman Empire. Here's the link for more information and tickets: http://www.hmns.org/exhibits/special-exhibitions/pompeii-the-exhibition/

Look forward to seeing you at our next Zoom presentation! Please email me at president@txhas.org if you have any questions about the Houston Archeological Society.

Houston Archeological Society
Monthly Meeting
February 18, 2021

Due to the electrical power issues experienced recently in Texas the February 18th Monthly Meeting was cancelled. Gary Pinkerton's program on Trammel's Trace will be reschedule to a later date.

Beth Kennedy, Secretary

Notes on Munitions
Accoutrements - My Powder Horn
Part 1
By Tom Nuckols

Introduction

In North America, during the era of flintlock muzzle-loading firearms, soldiers on either side in any battle[1] used smooth bore muskets. Civilian volunteers used rifles. The necessary accoutrement (accessory equipment) for a soldier carrying a musket was the cartridge box (Figure 1). The accoutrements for the rifleman, were the shot pouch and the powder horn (to be discussed in Part 2).

Figure 1.A British soldier during the American Revolution (1775–1783) holding a Brown Bess musket. The blue arrow points to his leather cartridge box. Picture courtesy of Pinterest @ https://www.pinterest.com/pin/464433780293043710/.

Musket Ammunition

The ammunition that a soldier used in his flintlock musket was a paper cartridge (cartridge). A cartridge contained a lead musket ball (ball) that had an *approximate* diameter of three-quarters of an inch, and a pre-measured amount of black gun powder (powder) The ends of the paper cartridge were usually tied with string at the ball end and folded over at the powder end to form a sealed unit[2].

Another type of cartridge that soldiers sometimes used was called the “buck and ball”. A buck and ball cartridge consisted of one ball and a number (usually three) of buckshot that had an *approximate* diameter of one-third of an inch (Figures 2 & 3).

[1] Examples would be the French and Indian War (1754-1763) and the American Revolution (1775-1783). During the Texas Revolution (1835-1836), soldiers of Santa Anna’s Mexican army carried British Brown Bess Muskets, while members of Sam Houston’s volunteer army carried a variety of weapons, including muskets and rifles.

[2] See *Notes on Munitions The Minié Ball (Part 1)* By Tom Nuckols, page 7 @ https://www.txhas.org/PDF/newsletters/2020/2020%20May%20Profile.pdf.

Figure 2. An 18th century paper musket cartridge made out of newspaper. It contains black gun powder and a single musket ball. Picture courtesy of Tumblr @ https://peashooter85.tumblr.com/post/161562860767/the-paper-musket-cartridge-today-when-one-thinks.

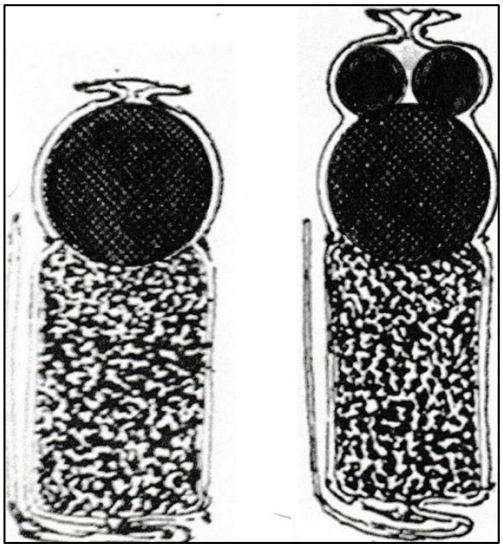

Figure 3. Cross sectional views (not to scale) of two paper cartridges. The cartridge on the left contains black gun powder and a single musket ball. On the right is a "buck and ball" cartridge containing, along with a musket ball, three buckshot. One of the buckshot is obscured from view because the three buckshot form a horizontal triangle when sitting on top of the musket ball. Illustrations by author.

The purpose of the buck and ball cartridge was to combine the musket ball with the spreading pattern of a shotgun; if a soldier missed his target with the musket ball, then maybe one or more of the buckshot might take effect.

Cartridges were carried in a leather cartridge box containing a wooden insert. The wooden insert had holes bored into it to hold individual cartridges (Figure 4). The cartridge box was normally carried over the shoulder on a leather or linen strap

Figure 4. A leather cartridge box with a wooden insert designed to hold twenty-four paper cartridges. Picture courtesy pf Pinterest @ https://www.pinterest.com/pin/425168021068827259/..

How A Soldier Loaded His Musket

To load his musket, a soldier, while standing, held the musket with his left hand. The flintlock's (the lock, not the musket) hammer was placed in the half cock position and the frizzen was flipped forward[3].

He then removed a cartridge from the cartridge box and tore the powder end open, usually with his teeth, exposing the powder. He then dumped a small amount of powder into the pan and closed the frizzen over it.

Then, the soldier placed the butt of the musket on the ground, he used his right hand to pour the rest of the powder down the barrel. This was followed by the ball. The ball was left in the paper and both the paper and ball were pushed down the barrel with his thumb. Next, he removed the ramrod from its holding position under the muskets barrel and used it to push the paper and ball down the barrel until it rested on top of the powder. The paper acted as a wad to prevent the ball from rolling out of the barrel if the musket was tipped downward and it also kept the ball from bouncing down the barrel when the musket was fired.

Leaving the ball in the paper also destroyed the windage. In firearms parlance, the term "destroying the windage" meant that the paper eliminated the fraction of an inch gap between the ball and the bore through which propellant gasses, created by the ignition of the powder, could escape. This placed more energy on the ball and increased its velocity.

The soldier then removed the ramrod and returned it to its holding position. Bringing the musket to his shoulder, he used his right hand to bring the hammer to full cock, and the musket was ready to fire[4].

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[3] For an illustration of how a flintlock works see Nuckols et al (2014: 66). Available for download here: https://www.txhas.org/PDF/reports/powell/The%20Elizabeth%20Powell%20Site%20Report%20Number%2025%20Part%203%20Indexed.pdf.

[4] To view a reenactor soldier loading and firing a Brown Bess musket, see *Brown Bess Musket: three shots in 46 seconds @* https://www.youtube.com/watch?v=SJMbxZ1k9NQ.

New Book by HAS Member Dan Worrall
A Prehistory of Houston and Southeast Texas

HAS member Dan Worrall has released a new book on the prehistory and physical landscape of our area, entitled *A Prehistory of Houston and Southeast Texas: Landscape and Culture.* The book employs ArcGIS technology to couple a serial reconstruction of the paleogeography of the area since the peak of the last ice age with maps showing activities of Native American people and cultures on that landscape. Those maps employ a digital database, originally compiled by former HAS president Leland Patterson in the 1990s, which was updated to reflect the current status of HAS and other site studies of Southeast Texas. The book is a first comprehensive look at the combined physical and cultural development of this region and contains 504 pages and over 350 full color maps, charts, and illustrations. Topics include serial paleogeographic maps detailing the effects of 125m of post-glacial sea level rise, and a reconstruction of the pre-European vegetal landscape.

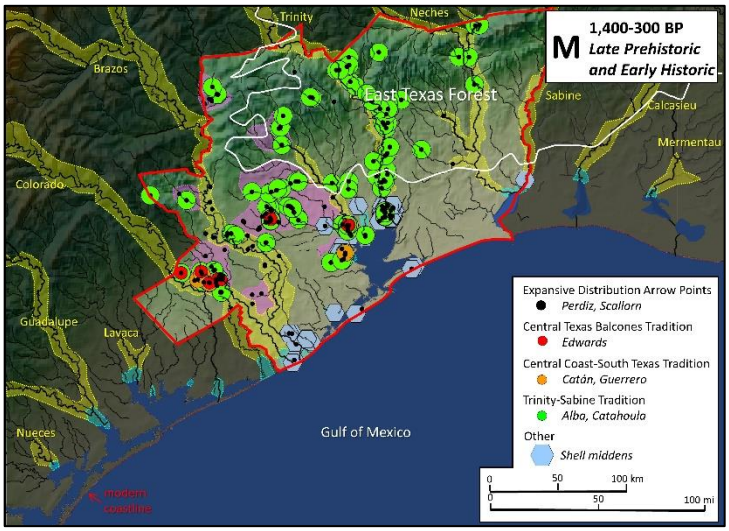
- Serial paleogeographic maps detailing the effects of 125m of post-glacial sea level rise, and a reconstruction of the pre-European vegetal landscape
- Compiled first person ethnohistoric accounts of the cultural practices of Bidai, Akokisa, and Coco peoples, written by early Spanish, French and Texian observers
- Extensive map analysis of projectile point distributions, with interpretation of residential and migratory hunting practices of people of several regional point traditions
- A map-based model of bison hunting on the Katy and San Bernard prairies from the Paleoindian through early Historic periods, including ethnohistoric accounts of the use of prairie fire in bison and deer hunting and management in the early Historic Period
- Distribution maps of lithic artifacts and ceramic types
- Analysis of the extensive long-distance exchange network of the Late Archaic Lower
- Brazos culture, including regional distribution maps of boatstones, corner tang knives, and marine shell pendants, as well as a regional map of known Native American trails of the early Historic period.

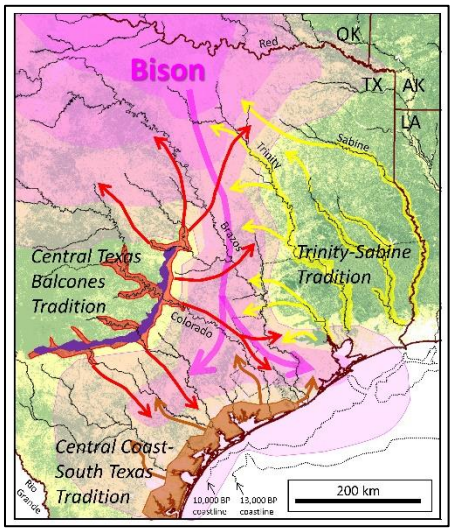
Complimentary copies of the book have been placed at regional university libraries (Rice, UH, SFA, Lamar, TAMU, UT Tyler, SHSU), archeological center archives (TARL, UTSA-CAR, Louisiana Division of Archeology in Baton Rouge) and public libraries (HPL Houston Metropolitan Research Center as well as the Fort Bend County Library in Richmond). Retail outlets include Amazon online as well as local bookstores (Brazos Bookstore, Becker Books, and

the museum shop of the San Felipe de Austin State Historic Site in San Felipe). The retail price is $65 plus tax.

In recognition of the role that past and present HAS members have played in collecting and making available much of the archeological data contained in the report, copies will be available at cost to HAS members at a planned HAS talk by Dan in the late summer or fall, as soon as in-person meetings resume. Meanwhile, to facilitate earlier distribution during COVID-19, he will also sell copies to HAS members by mail at cost ($40) plus sales tax ($3.32) and packing/shipping ($6.20). If this is of interest, send a personal check for $49.52 and a shipping address to Dan Worrall, 4911 Bowser Road, Fulshear, Texas 77441.

Finally, Becker Books will hold an outdoor, socially distanced book launch and signing event for this book on March 28, 2-4 pm, at 7405 Westview, in the backyard.





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HAS Memberships for 2021 Are Now Due

We hope you will renew your membership in the Houston Archeological Society and maybe even give a membership as a gift to someone you know will enjoy digging up Texas history with us – one trowel full at a time. You can download a membership form here http://www.txhas.org/PDF/HAS%20Membership%20Form.pdf and mail it into us with your check, or you can pay online via our website using your Credit/Debit card.

Our membership is the best deal in town: $25 Individual membership. $30 Family Membership, $35+ Contributing membership, $15 Student membership

Remember that benefits of your membership include the unique opportunity to dig with us at archeological sites in the area, work with us at our labs where we process artifacts from those sites, and your FREE copies of our current academic publications including HAS Reports and Journals. Please join us!!!!

ARCHEO CORNER: The Origin of Edwards Chert

Wilson W. "Dub" Crook, III

Texas contains some of the finest quality chert resources in all of North America. Found across the physiographic region known as the Edwards Plateau, the chert has been given the name for its source region and is simply known as "Edwards chert". Edwards chert has been found not only in archeological contexts across the State of Texas but in all its neighboring states and as far away as Colorado and the northern Great Plains. Edwards chert was particularly favored by the Clovis culture, who are well known for their preference in finding and using the highest quality lithic materials. However, despite its well-known use as the source rock for lithic tools from Older-than-Clovis (Upper Paleolithic) to Late Prehistoric times, little scientific attention has been given to determining its origin.

There is some confusion about the term "chert" versus "flint". While European geologists argue there is a real difference, as a mineralogist, the term "flint" is largely a matter of semantics. In the U.S., mineralogists generally consider flint to be a dark gray-colored variety of chert. In the U.K., flint and chert are considered to be two separate species with flint being a higher quality stone that comes from the chalk beds of southern England and France. By this definition, chert is considered to be lighter colored, impure, and of a lesser quality. In reality, the two types are identical in terms of basic chemical composition and origin and the overarching term of "chert" will be used here.

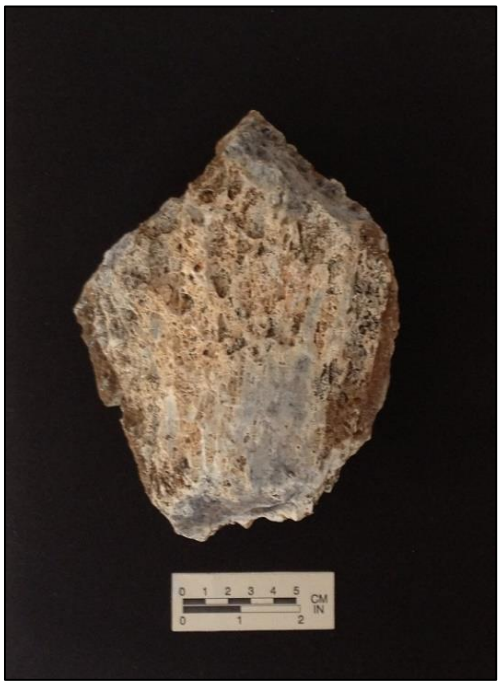
In 2012-13, the author was asked by the Gault School of Archeological Research (GSAR) to conduct a geologic study of the Cretaceous limestones which crop out in the area of the Gault site and determine an origin for the chert found in the Edward's limestone. The following is a brief summary of that research.

The Edwards Plateau is a roughly elliptical region which is defined by the geomorphic expression of its resistant bedrock, namely thick, flat layers of Cretaceous limestone. In aerial extent, the Edwards Plateau extends west to the Pecos River and the Chihuahuan Desert, about 400 kilometers west of Austin. Its northern and southwestern boundaries are not as well defined, however, it is generally accepted that the Plateau is bounded by the Llano Uplift and the Llano Estacado to the north, an area roughly 150 km north-to-south. Within the eastern part of the Edwards Plateau, the Gault site lies in a geomorphic province known as the Lampasas Cut Plain, a roughly triangular area of rolling hill country bounded by the Brazos and Colorado rivers. The region around the site itself is a limestone upland, which has been deeply dissected into dendritic patterns by the Brazos River and its tributaries, including Buttermilk Creek. Cherts are locally abundant throughout the region, forming thin veins and/or nodules within the Cretaceous limestone bedrock.

During the middle of the Cretaceous Period (~100-112 million years ago), the Gulf of Mexico transgressed into the southern part of North America including most of what is now Mexico, Texas, southern Arizona, New Mexico, Oklahoma, and southwestern Arkansas and Louisiana. In Texas, only a few topographic highs, mainly in the Llano Uplift, remained as isolated islands. While the submergence by this interior seaway was widespread, the water was not particularly deep. Evidence of a shallow and warm water marine environment can be seen in many of the exposed outcrops of the Edwards Plateau including ripple marks, mud cracks, and reef-forming fossils. In the area of the Gault site, the Cretaceous period is represented by two distinct formations – the Comanche Peak Formation which forms the bedrock within Buttermilk Creek valley below the Pleistocene and Holocene Quaternary alluvium, and the Lower Cretaceous Edwards Group. No chert is found within the Comanche Peak Formation. However, the basal member of the Edwards Group, known as the Kainer Formation, contains large, abundant nodules and seams of chert. The base of the Kainer consists of fine-grain dolomitic mudstones (micrites) that were deposited in an extensive shallow water marine platform bounded by deeper water basins. The shallow water platform was home to an abundance of life, including large reefs of Rudist pelecypods and sponges, as well as micro-organisms such as diatoms, radiolarians, and foraminifera.

Rudist pelecypods, an extinct Cretaceous bivalve, replaced by silica, Kainer

In the latter part of the 19th century, the prevailing theory on chert formation was that nodules and veins were the remains of colonies of siliceous sponges where the silica-rich spines inside sponges (known as "spicules") were cemented together by partial solution and re-deposition of free silica. The visual presence of sponge spicules in some cherts was offered as evidence for this process. Not believing that chemical actions on sponge spicules alone could result in the mass of chert beds seen globally, some researchers postulated that cherts were the product of the inorganic precipitation of silica. However, this theory gained little support amongst geologists mainly as it does not explain the incorporation of fossils which can be seen in many cherts and why a number of cherts around the world, including Edwards chert, show direct, selective replacement of fossils by silica.



Large Rudist pelecypod split open to show its complete replacement by silica, Kainer Formation (Edwards Group), Gault site (41BL323), Bell County, Texas. The brown coloration is from recent iron staining.

As a result, starting in the 1950s, a growing number of researchers began citing evidence for a replacement origin of chert. Since diffuse silica in sea water is virtually impossible to precipitate by inorganic means, organic agents were thought to be largely responsible for chert formation. It is now widely accepted that silicon, in the form of silicic acid, is delivered into the oceans via three major pathways, known as the biogeochemical cycle of silicon. The first pathway is by fluvial action through the chemical weathering of sedimentary and crystalline rocks. The silica then enters streams and rivers and is carried to the oceans by CO_2-charged waters. While this first pathway contributes the greatest yield of silicon into the oceans, aeolian erosion (especially in deserts), and the weathering of submarine basalts also contribute to the levels of silicon present in the world's oceans. The dissolved silica is then removed from the sea water principally by the biologic processes of diatoms, radiolarians, silicoflagellates (unicellular algae), rudist pelecypods, and sponges. In the case of the Edwards Plateau, the presence of massive, silica-rich igneous and metamorphic rocks in the nearby Llano Uplift could have provided abundant silica into the ocean system for these organisms to concentrate. Given the fact that the Lower Cretaceous seas over the area of the Edwards Plateau were warm and shallow, conditions would have been ideal for high concentrations of marine lifeforms.

With post-depositional burial, the silica trapped in these micro-organisms would have rapidly come into equilibrium with water trapped in the sediment. Organically precipitated amorphous silica is considerably more soluble than quartz. As such, an increase in the pH within the sediments will result in more silica being dissolved and a subsequent reduction in pH will cause silica to be precipitated. The alteration of organic material in the sediment by bacterial activity can create this type of pH fluctuation, thus creating a silica trap. The presence of limestone muds into fractures in some chert nodules demonstrates that silicification proceeded lithification of the rock. Thus, the formation of chert in the Edwards Formation appears to be relatively early in the diagenetic history of the sediment before lithification and the destruction of pore space. This process did not occur as a single event but rather repeatedly over time and in different parts of the Edwards section. Chert distribution is therefore controlled by the porosity, permeability, and faunal content of the pre-existing sediment.

Experimental studies have shown that the creation of chert can either be a slow or relatively rapid process. Research has estimated that cherts formed in clay-rich, deep oceanic basins may require 30-60 million years to form. In contrast, cherts that form within carbonates require only 5-20 million years to crystallize. And if the carbonates are in shallow, warm seas, chert formation may take as little as a few thousand years. Given the periodic progression and regression of the Early Cretaceous seas across Texas and much of the mid-continent, it seems likely that cherts within the Edwards Formation formed over a series of repeated diagenetic events, each characterized by reef formation, deposition, uplift and exposure, dolomitization, burial, and finally silicification.

Edwards chert found in and around the Gault site comes in a wide range of color varieties. These include everything from black, to dark bluish black, to various shades of lighter bluish gray, to grays, to light olive-brown, to yellowish-brown, to brownish yellow, to yellow, to white. A similar wide color range is seen in the cherts present at the nearby Fort Hood Military Reservation. Previous researchers have given these color varieties a number of names which generally refer to a specific color variety. These include Owl Creek Black, Fort Hood Gray, Gray-Brown-Green Mottled, Fort Hood Tan, Heiner Lake, Pedernales Pink, Leona Park, Cowhouse White, and Texas Novaculite. The latter, which can also be found at the Gault site, is not a true novaculite but actually a variety of chalcedony.

Trace element chemical analysis of these different colored cherts using X-ray fluorescence (XRF) technology showed very little changes in composition across the color bands. Thus, the color differences must be due to minute replacement of silicon by other elements, mainly iron, in the lattice structure of the chert which then results in a different absorption and reflection of light to the human eye.

Large white to light-gray chert nodule in place in the upper part of the Kainer Formation (Edwards Group), Gault site, Bell County.

Kainer Formation limestone outcrop at the Gault site, Bell County, Texas. Note the large, white-colored chert nodule in the left-center portion of the photo (near the hole between rock layers).

Eroded chert nodules littering the Buttermilk Creek valley floor at the Gault site, Bell County, Texas.

Geologic specimens showing the wide range of colors in chert found at the Gault site, Bell County.

The Alamo, the Structure and the Icon

by Louis F. Aulbach, Linda C. Gorski, and Tom Nuckols

The month of March is the time when Texans remember the historic events of the Texas revolution that brought independence from Mexico in 1836. The most significant event in March 1836 was the siege of the Alamo by the Mexican army under the command of General Antonio López de Santa Anna. On March 6, 1836 the siege ended when the stronghold of the former Mission San Antonio de Valero was overrun and almost all of the Texans in the compound were killed. The chapel of the mission complex became the iconic image of that event, and it was immortalized with the slogan "Remember the Alamo" as the Texian army defeated Santa Anna's troops about seven weeks later at San Jacinto.[1]

Today the image of the Alamo, perhaps the most recognizable symbol of the Texas revolution, is known around the world. So popular is the image that it is often used in commercial advertising (see Figure 1). And, yet the image that is presented is not an image that the members of the Texian army would recognize. A sketch drawn by Mary Maverick in 1838, only two years after the siege, shows that the chapel was largely in ruins (see Figure 2) and the structure was lacking the distinctive bell-shaped ornament on its front facade.[2]

Figure 2. Alamo in commercial advertising.

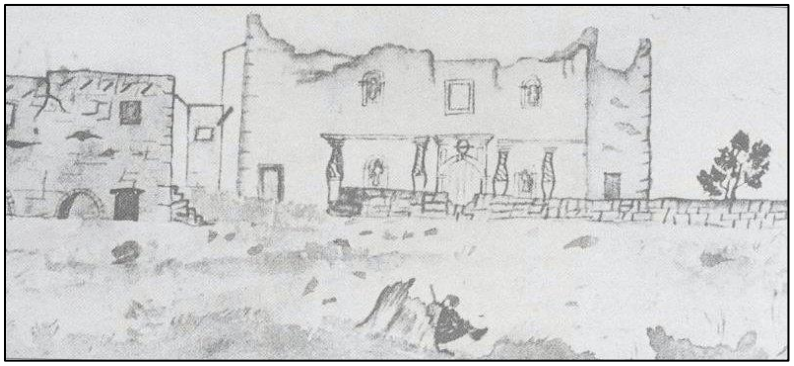


Figure 2. Sketch of the Alamo by Mary Maverick, 1838. (Wikimedia Commons)

The Mission San Antonio de Valero was established in 1718, and the construction of a permanent stone church began in 1744. The completed church structure had two stone towers flanking the sides of the front facade and a roof with a barrel vault and dome. It probably looked similar to two of the other mission chapels that survive from that period in San Antonio at Mission Concepcion and Mission San Jose (see Figures 3 and 4). The new chapel of Mission San Antonio de Valero, completed about 1756, did not last long. It collapsed after about five years and a replacement was begun immediately, but the new chapel was never completed. The unfinished chapel was subsequently occupied by the Texian army in December 1835.[3]

Figure 3. Mission Concepcion. (Photo: Louis F. Aulbach)

Figure 4. Mission San Jose. (Photo: Louis F. Aulbach)

The Alamo chapel of 1836 was somewhat accurately portrayed in the John Wayne's 1960 movie of the siege and the battle, although apparently Wayne insisted that a small bump in the top of the facade be included in the battle scene so that the audience could make the connection with the modern image of the Alamo chapel (see Figure 5).[4]

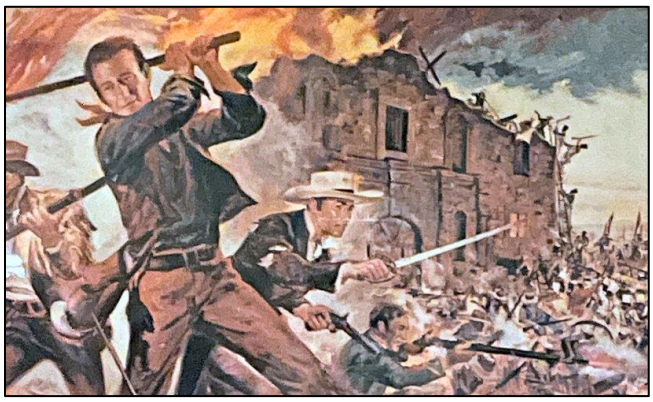


Figure 5. John Wayne's Alamo.

So where did the modern image of the Alamo come from?

In the late 1840's, the U. S. Army, stationed in San Antonio, leased the mission complex to warehouse its supplies and equipment. A recommendation was made by Major E. B. Babbitt to demolish the old stone walls of the former chapel and build a new warehouse. Instead, about 1849, the base commander, General Jessup, ordered that the existing church structure be repaired, and a second floor was added to the nave and a wooden roof was put on the chapel. It was at this time that the distinctive parapet was added to the front facade.[5]

The design of the bell-shaped ornament appears to have been borrowed from an architectural feature on the *convento* of the nearby Mission San Jose. A sketch of Mission San Jose drawn in 1848 by Capt. Seth Eastman shows the ornamental stonework that is quite similar to the

modification of the front facade that was built to close in the west gable of the new roof of the Alamo chapel (see Figure 6).[6]

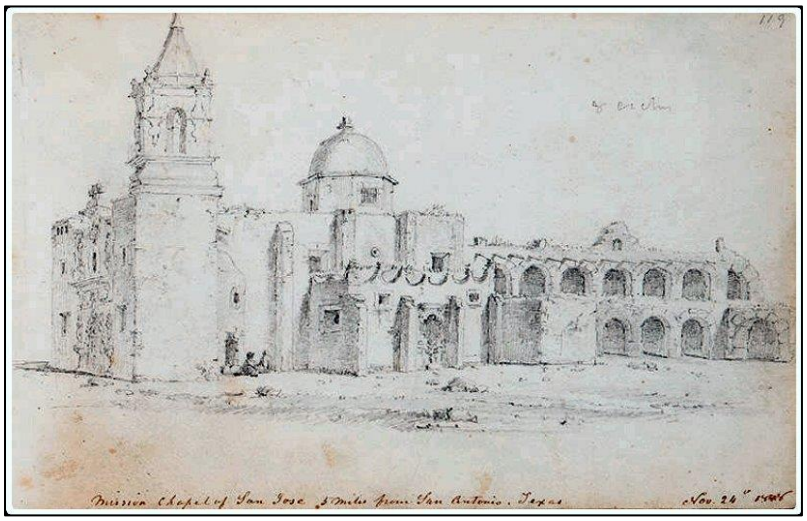


Figure 6. The bell-shaped ornament on the convento of Mission San Jose, 1848. (Courtesy of the McNay Art Museum.)

This rather functional renovation of the dilapidated church structure created the iconic symbol of the Texas revolution, an image known around the world as one aspect of the legend of Texas.

Footnotes

1. Alamo Mission in San Antonio. *Wikipedia*, accessed February 22, 2021, https://en.wikipedia.org/wiki/Alamo_Mission_in_San_Antonio.

2.File: Alamo 1838 Maverick.jpg. *Wikimedia Commons*, accessed February 22, 2021, https://commons.wikimedia.org/wiki/File:Alamo_1838_Maverick.jpg.

3. Ramos, Mary G. The Alamo. *Texas Almanac*, accessed February 22, 2021, https://texasalmanac.com/topics/history/alamo.

Alamo Mission in San Antonio. *Wikipedia*.

San Antonio de Valero Mission/The Alamo, San Antonio, Texas. *National Park Service*, accessed February 22, 2021, https://www.nps.gov/nr/travel/american_latino_heritage/The_Alamo.html

4. Figure 5. Photo courtesy of Tom Nuckols.

5. Nelson, George . *The Alamo. An Illustrated History* (Dry Frio Canyon, TX: Aldine Press, 1998), 71.

6. Nelson, 69-71.

Houston Archeological Society
Monthly Meeting Programs for 2021
6:30pm Third Thursday of every month (except June)
(Until further notice meetings are virtual for members only)

April 15 - **Reign Clark, Ron Ralph, Catrina Whitley** – Back to Bondage: The Sugar Land 95 Archeological Project.

May 20 - **Steve Stoutamire, Hill Country Archeological Association**, A Newly Discovered Paleo Indian and Multicomponent Site in Kerr County, Texas.

June 17 – **Gary Pinkerton**, Trammel's Trace – the First Road from Texas to the North.

July 15 – Report on TAS Field School at Kerrville.

August 19 - **Dr. Catherine Jalbert, Shannon Smith** – Archeology at Levi Jordan and Varner Hogg Plantations.

All **Houston Archeological Society** meetings are normally free and open to the public. However, due to the COVID-19 situation they are currently being conducted virtually for members only. For more information about HAS then visit our website at www.txhas.org or email lindagorski@cs.com. You can also join our Facebook page at https://www.facebook.com/groups/123659814324626/

Please submit articles for publication to *The Profile* Editor Bob Sewell at newsletter@txhas.org. Please submit articles for the April issue no later than 24th March, 2021.

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