

www.txhas.org**MONTHLY HAS MEETING AUGUST 20th, 2020 TO FEATURE PROGRAM ON
CULTURAL RESOURCES MANAGEMENT ARCHEOLOGY**

Ashley Jones, Houston Archeological Society Board member, professional archeologist and vice president of the archeological firm MAC/CEI will present the program at the August HAS month meeting on CRM (Cultural Resources Management) Archeology. The ZOOM meeting will be held for members only on Thursday, August 20 at 7:00 p.m. HAS members should watch for an email detailing how to join this meeting closer to the date.

As members of HAS, we are frequently included in professional archeology projects. Have you ever wondered why a particular project was being undertaken or why a particular location was being excavated? Ashely will answer these questions by presenting an overview of the history of CRM archeology in the US and Texas and how this led to the development of archeology as a profession. She will discuss cultural resources and why they need to be managed, the roles of professional archeologists, the laws and regulations that guide archeological investigations, and the different phases of archeological field work.

Ashley joined MAC/CEI in 2018. She has extensive cultural resource management experience including participating in pedestrian surveys, test excavations, and large-scale data recovery excavations across the southwestern United States. She has completed field investigations in Texas, Oklahoma, Ohio, New Mexico and Arizona. In addition to serving on the HAS Board, Ashley serves as PI (Principal Investigator) on the Kleb Woods Nature Center Public archeology program in northwest Harris County.



When she is not in the field, Ashely also serves as a commissioner on the City of Houston's Archeological and Historical Commission (HAHC) and is the Director of Student Relations for the Houston Chapter of WTS, an international organization for transportation industry professionals.

For more information about the August meeting and program, which you can enjoy from the comfort of your own home in front of your own computer, email lindagorski@cs.com As soon as this Covid pandemic is over we plan to begin meeting in person again at the Trini Mendenhall Community Center.



President's Message – Linda Gorski



As most of you know, the COVID pandemic has caused many organizations to become creative as they try to hold meetings virtually – and HAS is no exception. In case you missed the first ever HAS Zoom Meeting and program this past Thursday, a recording is now posted on the brand new HAS YouTube channel for your enjoyment. Thanks to Dr. Liz Coon-Nguyen and her absolutely brilliant son, Julian, for making this happen!!!! This presentation highlights continuing research by Louis Aulbach, Linda Gorski and others into the abandoned border villages in the Big Bend area of Texas.

Before you watch this video please remember that this is our FIRST TRY so there are some technical difficulties that were caused primarily by the presenters (Louis Aulbach and me -- MEA CULPA). The first thing you will see when you pull up the video is a slide announcing our AUGUST program which will be held at 7 p.m. on August 20 on ZOOM and will be presented by archeologist Ashley Jones (see page 1 of this newsletter for more information). Then you will see a minute or two of black screen with my voice and Louis's voice in the background describing the video to come. HANG IN THERE. The actual slides will begin at approximately 3:26 into the video.

This presentation is a compilation of research from trips to the Big Bend that Louis and I and others took over a 12-year period from about 1998 - 2010. As some of you know, Louis and I are avid paddlers who canoed the Rio Grande several times, and during these trips, we noted several abandoned Mexican villages along the river that needed to be properly explored. So in addition to our paddling trips to the Big Bend, we started planning trips that would give us an opportunity to hike and explore on land, usually for a week to ten days in February and again in October or November -- cool weather.

The villages we explored (and continue to explore) were abandoned (or destroyed) in the 1940s when the area became the Big Bend National Park. As we hiked we noted that the vernacular structures built out of adobe, wood, brick and other easily attainable materials and the scatter of household items left behind had a story to tell about the people who lived there from the late 1800s until the 1940s - and we were determined to tell that story! So before each trip we did lots of research -- pored over topographic maps, read everything we could about the families who lived in those villages, scrutinized census records and old maps, delved into archives in Austin, including the W. D. Smithers collection at the Harry Ransom Center and in Alpine at Sul Ross University, and then came up with a specific plan for the next trip. We would locate ourselves in a primitive campsite near the area that we wanted to research during that particular trip (so we wouldn't waste time driving), and every day we would hike into the back country looking for sites. We did not dig -- not once, not ever. Never even carried a trowel. All the artifacts you see in the presentation were on the surface, clearly visible. We photographed them and carefully placed them right back where we found them. Then, we came back to Houston and researched and catalogued every single artifact that we had photographed. In early 2021, the complete report that accompanies this presentation will be published in a Houston Archeological Society Journal that will highlight Texas archeology and history.

Louis and I continue to go to the Big Bend at least once a year (usually in November) and continue to hike and explore, but trips taken in those early years (1998 - 2010) are included in this presentation. We will have to do an update on what we have discovered in the past ten years!

So please sit back, be patient and enjoy this presentation which can be found at this link <https://youtu.be/5fxds2kNfSE> We'd love to have feedback! Many folks who have already watched this video have sent us their reminiscences of trips to the Big Bend and someday we hope to compile these memories in an article for everyone to enjoy.

**Houston Archeological Society
Monthly Meeting Minutes
July 16, 2020**

Welcome to the First Zoom HAS Monthly Meeting (from Liz Coon-Nguyen, Board Director and Meeting Host). Dr. Liz briefly discussed the logistics of holding the virtual meeting.

Treasurer's Report (Bob Sewell): Bob reported amounts in the HAS checking and savings accounts. If any member is interested in more information about HAS finances, please see Bob.

Membership (Bob Sewell): Our membership currently stands at 180, which is down somewhat from last year due to the current situation with the pandemic. Additionally, HAS hats are still for sale: a green and a blue color.

Website (Bob Sewell): The website is working fine; hopefully everyone is keeping up with what's going on. Thanks also to everyone who has contributed articles for the newsletter. If anyone wishes to write and share an article pertaining to general, Texas, or local archeology, please submit it to Bob.

New Business

Publications (Dub Crook): The new report on the "Peopling of the Americas" (Dub Crook, author) was passed out at the January meeting and will be distributed by mail in the next month or two (please email Linda if you need a copy). Additionally, another Special Report, a revision of the early archeology along the Trinity River, will be ready to go this fall. We will push the next issue of the Journal (on Western archeology) to the early part of next year. And finally, the Special Report on Texas archeology will be out at the end of this year.

Nominating Committee for next year's officers: The Nominating Committee, Sharon Menegaz, Louis Aulbach and Geoff Mills, will present the new slate of officer candidates at the August meeting. Voting will take place in September.

August Program: Ashley Jones, Principal Investigator and Project Manager for Moore Archeological Consulting, and HAS Board member, will present on Cultural Resources Management.

Tonight's Program was a presentation on "Historic Artifacts of the Big Bend," by Linda Gorski and Louis Aulbach, whose explorations of old village sites in the Big Bend area revealed a treasure-trove of historic artifacts. This program is available at www.youtube.com. Search under July 16 2020 Houston Archeological Society.

Note: All HAS Monthly Meetings will remain virtual until further notice!

Beth Kennedy, Secretary

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**Nominating Committee Appointed
for 2020-2021 HAS Officers and Board of Directors**

Per Article IV, Section 4 of the HAS constitution HAS president, Linda Gorski, has appointed a three-person nominating committee to come up with a slate of officers for 2020-2021. Serving on this committee will be Louis Aulbach, Sharon Menegaz and Geoff Mills. At the August HAS meeting (which will be held virtually) the nominating committee will present the nominations for President, Vice President, Treasurer and Secretary as well as one Director-at-Large Position. The other two Director-at-Large positions have 1 and 2 years remaining on their terms. An email will also go out to all members announcing the slate before the August meeting. Election of officers will be held at the September meeting (also likely to be held virtually if the Covid pandemic continues). We will announce at a later date how we are going to tally votes from members and take nominations from the "floor".

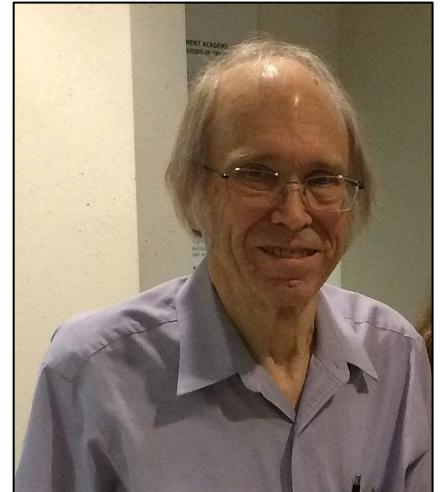
If you have any questions about the nomination and election process, please email me at lindagorski@cs.com.

In Memory of Richard L. (Dick) Gregg

Richard L. (Dick) Gregg, age 77, of Nevada, Ohio and formerly of Houston, Texas, passed away Tuesday, July 9, 2019, at the Kingston Residence of Marion, Ohio. Services for Richard L. Gregg were private with burial at Nevada Cemetery.

We recently learned of the passing last year of our friend and mentor Richard L (Dick) Gregg. The very short obituary above was published in Dick Gregg's hometown newspaper for a man who was, literally, a legend in Texas archeology and to whom Texas archeology owes a huge debt of gratitude. The members of the Houston Archeological Society hope we can do better with an obituary that will properly honor this very special man.

Dick Gregg was born and raised in Nevada, Ohio. He graduated from Nevada High School in 1959. This brilliant man received his BEE in 1964, M.Sc in 1964 and his PhD in 1968 all from Ohio State University, in electrical engineering. He was employed as a geophysicist with Shell Research and Development in Houston although he also spent several years in the Netherlands. But Dick's true passion was archeology, sparked in the early 1970s by his mentor, noted archeologist Lou Fullen, and his relationship with other avocational and professional archeologists across the State of Texas.



Once retired from Shell, Dick had even more time to devote to archeology. Dick joined the Texas Archeological Society (TAS) in 1970 shortly after moving to Texas. He was an active member of not only the TAS but also the Fort Bend Archeological Society, the Brazosport Archeological Society as a founding member, and the Houston Archeological Society where he served as the editor of the HAS Newsletter for over 30 years and as president from 1977 – 1979. In 1984 Dick was invited to be one of the first 10 members of the Texas Historical Commission's Texas Archeological Stewards Network and continued to serve as an active member until he moved back to Ohio in 2016 when he began experiencing health problems.

Putting his engineering background to work in the field of archeology, Dick became interested in non-destructive investigative techniques and began attending Bureau of Land Management workshops on the use of remote sensing systems. Dick was instrumental in the acquisition by the Fort Bend Archeological Society and the Fort Bend County Historical Commission of two of the remote sensing systems described and demonstrated in those workshops, electro/magnetic conductivity and ground penetrating radar. Later he developed procedures for performing systematic electro/magnetic survey data acquisition, processing, and interpretation. Dick participated in many electro/magnetic surveys at archeological sites in Fort Bend County and at numerous TAS Field Schools.

Few avocational archeologists have dedicated more of their time and unique skills to archeological projects in southeast Texas, answering the call in Liberty, Wharton, Austin, Harris, Fort Bend, and Brazoria Counties to name but a few. Described by his closest friends and colleagues as being methodical, exacting, and rigorous in the application of proper archeological field methods, Dick stands out as one of those members of the TAS who exemplifies what it means to be a dedicated and selfless team player.

Dick Gregg was respected throughout the avocational and professional communities and several of his colleagues have chosen to add their reminiscences to his obituary:

Professional archeologist Douglas Mangum with MAC/CEI had this to say: "Dick Gregg was one of those people I felt like I could always talk to. In the many times that he volunteered to help us during our various

battlefield investigations, I always made sure to seek him out at least once a day to get his impression of the work and to discuss my own thoughts as well. The back and forth of those conversations was something I looked forward to because his wit and wisdom made them both fun and informative. Even when his health was waning, Dick sought to join our projects because his commitment to and interest in the work was that strong... and he always found a way to contribute. He will be much missed."

Several of his fellow avocational archeologists and TASN colleagues also shared memories.

Beth Aucoin said "Dick was an incredible avocational archeologist!! So knowledgeable in so many areas - ceramics, fish and faunal—he collected many bones/specimens, sometimes burying critters in his yard and then retrieving the bones for study later. An avid reader and researcher with an incredible personal library. Dick had an extremely dry sense of humor and was often dogmatic about many things. He and I often had a difference of opinion, but he was willing to share his knowledge. He was a unique individual."

Sheldon Kindall: "For me, everything I have done relating to archeology has involved Dick Gregg in one way or another. Dick never passed up an opportunity to participate in any archeological investigation. His interests were broad in general but recovering data from the past was his favorite task. He excelled at recovering, processing, and documenting data."

Joe Hudgins said: "I have known Dick Gregg for as many years he has participated in meetings and archeological field trips for HAS and Fort Bend AS. Dick is true to his nature which is being *exact and meticulous; slow but sure; dependable*. Over the years HAS spent in Wharton County doing archeological surveys, Dick was part of that core group known as the *Dirty Half Dozen* that could be counted on to show up first and be the last to leave.

Charlie Gordy said: When I was new to the field, I considered him my mentor and always enjoyed working with him in any capacity but especially unit excavation. He was a perfectionist and I always either learned something new or a better way.

Johnney Pollan added: Those of you in the archeology world who worked with Richard (Dick) Gregg knew that Dick was a stickler for accuracy. He and I were laying out a series of 1m x 2m units at Velasco and it took BAS (Brazosport Archaeological Society) nearly 20 years before Dick could accept +/- 3mm as good enough. He was always learning and he wanted to know the various ceramic transfer patterns without going to reference books. After many years, Dick was one the best at determining the pattern "Canova" from small sherds. He was a charter member of BAS and made sure that the young society was always on the straight and narrow. One thing that many people may not know was Dick's favorite soft drink. It was Nehi Grape soda - only in a glass bottle. Once Marcy Grubbs presented Dick with a full case for his birthday. He never let Marcy forget the kind gesture. Just a few memory strands about my relationship with Dick. We all will miss him and a few of his quirks (good quirks) that made him special and a good friend.

As for me, Dick Gregg was a hard act to follow. He kept me on my toes during my tenure on the Board of the Houston Archeological Society and more recently as President of the organization. Dick was never afraid to express his opinions and I soon realized that his opinions, based on years and years of experience in the field, were offered for the greater good. I listened. Every time. And learned valuable lessons from this wonderful man. Rest in Peace, Dick. Your friends in Texas miss you!

Linda Gorski
President, Houston Archeological Society

“TAS AUCTION 2020” CONTINUES ON EBAY THROUGH NOVEMBER 1 TO SUPPORT THE TEXAS ARCHEOLOGICAL SOCIETY

The Houston Archeological Society’s Ebay auction to support the Texas Archeological Society continues into LUCKY WEEK 13 (July 26 – August 2). As you know by now, this auction is taking the place of the silent auction that would have been held at the (Covid cancelled) 2020 TAS Annual meeting. I’m thrilled to announce that thanks to our generous donors and bidders (and especially to our Ebay auctioneer extraordinaire, HAS Vice President Larry Golden) we have raised \$3,657.86 so far - more than halfway to our goal of \$6,000 before November 1! Please check out our incredible auction items this week, especially The Field Guide to Stone Artifacts of Texas Indians, a frame of extremely collectible gambling casino chips from the Sam Maceo era (1922-1957) in Galveston, Texas, including the Balinese Room, an authentic 1840 Texas Republic Redback \$5 note with a copy of the book entitled “The Paper Republic”, and to entice you to get back on the road after all this Covid thing is history, a collection of five terrific Texas guidebooks to help you identify cool stuff along your way. Check out the photos and captions below to see all the items in this week’s auction or go to www.ebay.com and type in “TAS Auction 2020” (be sure to include the quotation marks). This auction will run through Sunday night, August 2 at 7 p.m.

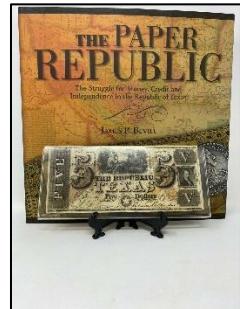
Our auctions run every week between now and November 1 and will begin at 7 p.m. on Sunday to the following Sunday at 7 p.m. Larry lists new and exciting items each week. And, yes, we are still accepting donation for this auction!!! PLEASE share this post with your friends. If you have any questions about this auction, please email me at lindagorski@cs.com or check out the TAS Auction page on our HAS website at [www.txhas.org] and click on the TAS Auction 2020 tab in the left column.



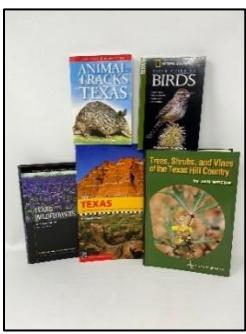
Most popular guidebook to identifying Stone Artifacts of Texas Indians



Frame containing 8 casino gambling chips from the “Sam Maceo” era 1922-1957 in Galveston including the Balinese Room.



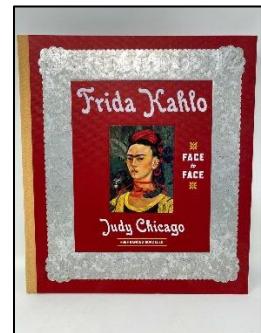
An authentic 1840 Texas Republic Redback \$5.00 note and a copy of James Bevill’s The Paper Republic, he Struggle For Money, Credit and Independence in the Republic of Texas



Get in your car and go! A collection of popular guidebooks to Texas – 100 Best Hikes, Birds, Animal Tracks, Flowers, Trees.



Remember Gilley’s??? Here’s a matchbook from the 1980s with George Strait on the bill!



Beautiful as new copy of a book highlighting the life of Frida Kahlo.

Notes on Munitions

The Minié Ball (Part 4 of 4)

By Tom Nuckols

Introduction

The Minié bullet was technically a bullet with a cylindro-conical shape. However, the Minié bullet is usually referred to as the Minié ball because of the popular term for ammunition that had been used for centuries, the musket ball. Even to this day some types of military ammunition are referred to as “ball ammo”.

The Minié Ball was developed to solve the issue of how to make a muzzle loading rifle easier to load. In the 1850s, the rifle musket using a Minié ball as ammunition replaced the smooth bore musket as a battlefield weapon. Rifle muskets looked like muskets and they had the same length as the smoothbore muskets they replaced¹. However, their barrel bores contained rifling. Rifling imparts a spin to a bullet thus improving its aerodynamic stability and accuracy.

Claude-Etienne Minié

Claude-Etienne Minié was born on February 4, 1804 in Paris, France. He joined the French Army and became a member of a light cavalry corps called the Chasseurs d'Afrique. After participating in several North African campaigns with the Chasseurs, Minié rose to the rank of captain. In the mid-1840s, Minié invented a bullet that resulted in a major improvement in firearm accuracy. Minié rose to the rank of colonel and retired from the French Army in 1858. Minié died in Paris on December 14, 1879.

Minié's Ball

The bullet that Minié invented was a simplified and improved version of what numerous European inventors had been experimenting with since the 1820s; namely, a muzzle-loading lead bullet that was smaller than the rifle's bore, making it easy to load, and then, when fired, it expanded into the bore's rifling.

Minié's invention was a lead bullet that was cylindro-conical in shape with three grooves at its base called *cannelures*, and a truncated cone shaped cavity containing an iron cup (see Figure 1).

The *cannelures* served two purposes:

- 1) they reduced the friction on the bullet as it traveled down the barrel bore;
- 2) they were shaped like saw teeth that acted like scrapers as the bullet traveled down the barrels bore, cleaning it of fouling. Fouling is the accumulated residue created by the burning of black gun powder.

The iron cup in the cavity was forced forward when the gun was fired, causing the bullet to obturate. Obturation refers to the process whereby gas pressure created by the ignition of gun powder presses the bullet's base outward and forces it into the rifling. Obturation also creates a self-sealing effect, preventing the gasses from escaping around the bullet, thus placing more energy on it and increasing its velocity.

James H. Burton

James H. Burton was born on August 17, 1823 in Shenandoah Spring, Virginia. He was educated at Pennsylvania's Westchester Academy. In 1844, he went to work as a machinist at Harpers Ferry Armory in Harpers Ferry, Virginia, subsequently serving as Foreman of the Rifle Factory Machine Shop where he worked on systems to mechanize firearms production.

In 1849, Burton was promoted to Acting Master Armorer and during the next few years, he experimented with improving Minié's bullet. By 1854, he had developed an improved version of the Minie ball that subsequently became the ammunition used extensively in the American Civil War. Burton died on October 18, 1894.

¹ Rifle muskets were long enough to serve one of the previous functions of muskets in close military formations when they were fired in ranks. They minimized the risk of the men in the rear ranks accidentally shooting the men in the front ranks in the back of the head.

Burtons Minié Ball

Burton improved the Minié ball by making some design changes. He widened the cavity and made it a triangular cone shape instead of a truncated cone shape. This made the base wall thinner and softer, insuring that obturation occurred. Thus, Burton was able to dispense with Minié's iron plug (see Figure 2).

Burton's version of the Minié Ball was adapted for use by the U.S. military in 1855. Technically, the countless number of Minié balls fired during the Civil War should be called "Burton balls". For reasons unknown however, the Minié ball retained Claude-Etienne Minié's name.

In 1857, the U.S. arsenals of Harper's Ferry, Virginia and Springfield, Massachusetts began manufacturing the muzzle-loading Model 1855 U.S. Percussion Rifle Musket. This was the first U.S. military firearm to fire the Minié ball in .58 caliber. One of the rifle-musket's new features was the Maynard tape primer system². In the early 1860s, when production ceased, 59,273 Model 1855s had been produced (see Figure 3).

The Minié ball and the American Civil War

Although the muzzle-loading rifle musket using a "3 ring"³, .58 caliber, 500 grain, 1 inch long, lead Minié ball⁴, was the predominate type of weapon and bullet used during the American Civil War by both Union and Confederate forces, a variety of other muzzle-loading weapons, both military and civilian, were used by both sides. Some of these firearms were made in the United States prior to the war. Some were made by the Union and/or Confederacy during the war, and some were imported by both sides during the war from the countries of Austria, Belgium, Britain, France and Germany. The Minié ball fired in these guns was in one of the following calibers: .54, .577 or .69.⁵

Civil War Ammunition

The most common ammunition used with muzzle-loading firearms during the Civil War was the paper cartridge containing a black gun powder charge and a lubricated Minié Ball. The Minié Ball's cannelures (sometimes referred to as "grease grooves") held the lubrication, which consisted of a composition of beef tallow and beeswax. The lubrication reduced the rate of bore fouling created by black gun powder residue. The wrapped paper cartridge was tied with string at the ball end and folded over at the powder end to form a sealed unit.

To load his rifle musket, a soldier removed a paper cartridge from his cartridge box and tore the folded end of the cartridge open, usually with his teeth, exposing the powder. The powder was poured down the rifle's musket muzzle. The Minié Ball was removed from the paper and pushed down the barrel with the ramrod until it rested on top of the powder charge. The ramrod was withdrawn and the soldier placed a percussion cap on the nipple of the percussion lock, and the weapon was ready to fire.

² See *The Maynard Tape Primer System* (Nuckols 2014: 6, 7). Available for download here: <https://www.txhas.org/PDF/newsletters/2019/2019%20August%20Profile.pdf>.

³ "Three ring" or "three ringer" is a slang term used by Civil War bullet collectors when referring to a Minié ball with three cannelures.

⁴ Although it did not change their appearance by much, the Minié ball's original design went through various subtle modifications and refinements before and during the Civil War. These design changes reflected different methods of manufacture, and locations of manufacture. Minié balls were made in two ways, either mold cast in a bullet mold or made in a machine called a bullet press.

⁵ One of the oldest firearms used in the Civil war, was the Model 1816 Flintlock Musket. The ammunition used in the 1816, was a lead musket ball with a diameter of 0.69 inches. Approximately 800,000 of these muskets were manufactured by Harpers Ferry and Springfield Armories from 1816 to 1840, and it was the last firearm to be made using the flint lock ignition system. In 1861, many volunteers, both North and South were armed with the 1816. During the Civil War, many 1816s were converted to the percussion lock system, but most retained their original flintlock.

The End of the Minié Ball

The Minié Ball in the U.S. was in use from 1855 to 1865. In September of 1865, Erskine S. Allin (1809- 1879), Master Armorer of the Springfield Armory, converted the Model 1861 U.S. Percussion Rifle Musket to a trapdoor breech-loading mechanism⁶. Five thousand of these rifle muskets were altered at the armory and went into U.S. service as the Allin Conversion Model 1865 Rifle, also known as the First Model Allin. The ammunition used in this rifle was a .58 caliber rimfire cartridge called the 58 Allin.

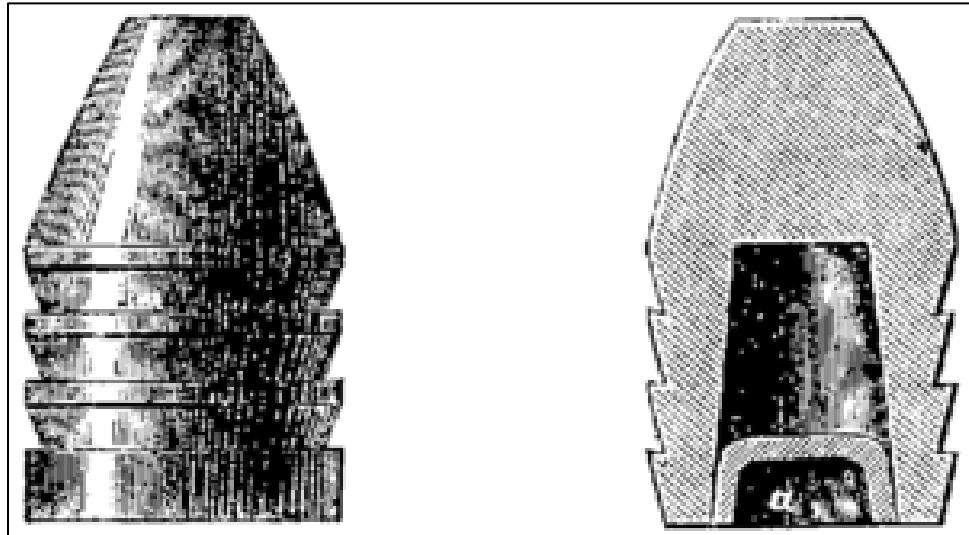


Figure 1. Minié's Ball on the left. At right is a cross sectional view showing the iron cup in the plug cavity. Picture courtesy of Wikipedia @ <https://en.wikipedia.org/wiki/Musket>.

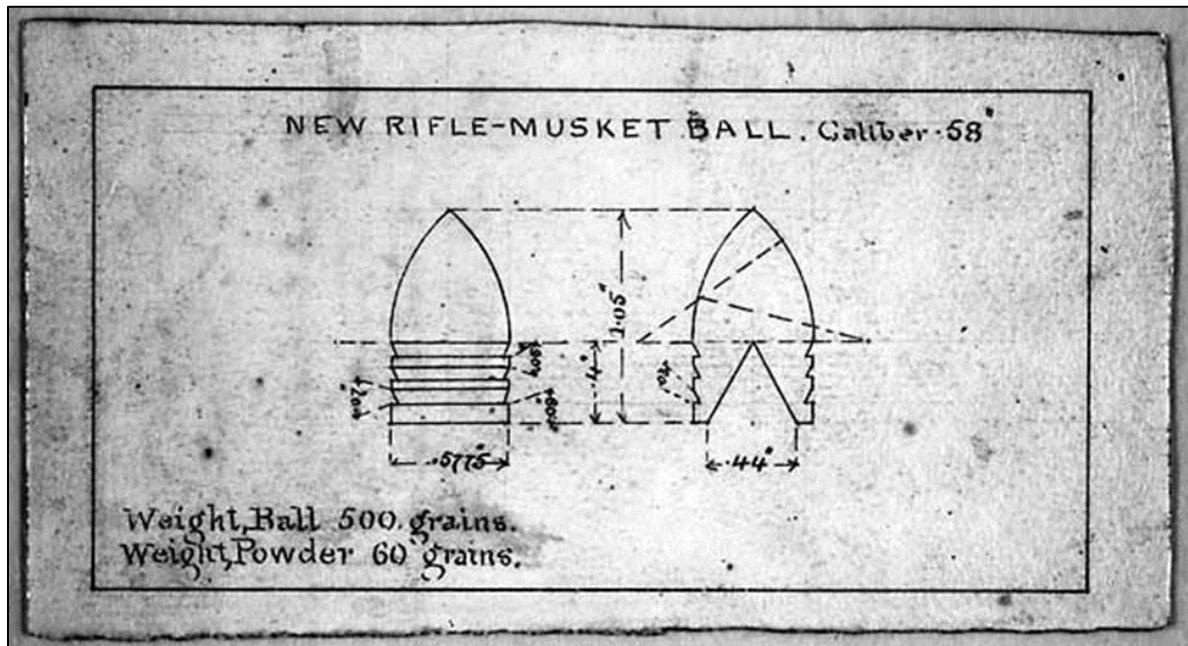


Figure 2. Burtons Minié ball design from the Harpers Ferry Armory. Picture courtesy of Wikipedia @ https://en.wikipedia.org/wiki/Mini%C3%A9_ball.

⁶ E.S. Allin, Breech Loading Firearm, Patented September 29, 1865, #49,959.



Figure 3. A Model 1855 Rifle Musket. Picture courtesy of Wikipedia @ https://en.wikipedia.org/wiki/Springfield_Model_1855.

References

Bilby, Joseph G.

- 1996 *Civil War Firearms. Their Historical Background, Tactical Use and Modern Collecting and Shooting*. Combined Books, Conshohocken, PA.
2006 *A REVOLUTION IN ARMS. A History of the First Repeating Rifles*. One Westholme Publishing LLC, Yardley, PA.

Coates Earl J. and Dean S. Thomas

- 1990 *An Introduction to CIVIL WAR SMALL ARMS*. Thomas Publications, Gettysburg, PA.

Encyclopedia Britannica

- 2020 “Claude-Étienne Minié,” <https://www.britannica.com/biography/Claude-Etienne-Minie>. Accessed July, 2020.

Flayderman, Norm

- 1998 *FLAYDERMAN'S GUIDE TO ANTIQUE AMERICAN FIREARMS...and their values*. 7th Edition. Krause Publications, Iola, WI.

McKee, Reid W. and M.E. Mason Jr.

- 1980 *CIVIL WAR PROJECTILES II. SMALL ARMS & FIELD ARTILLERY WITH SUPPLEMENT*. Rapidan Press, Mechanicsville, VA.

National Park Service

- 1996 Genius of Springfield. <https://www.nps.gov/spar/learn/historyculture/genius-of-springfield.htm>. Accessed July, 2020.

Sharpe, Philip B.

- 1958 *THE RIFLE IN AMERICA*. Funk & Wagnalls Company, New York, NY.

Thomas, Dean S.

- 1997 *Round Ball to Rimfire. A History of Civil War Small Arms Ammunition. Part 1*
1981 *Ready...Aim...Fire! Small Arms Ammunition in the Battle of Gettysburg*. Thomas Publications, Gettysburg, PA

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Historic Houston – Camp Logan Chronicles

Linda Gorski

With the August 2020 issue of the Houston Archeological Society newsletter, *The Profile*, we introduce a new column entitled *Historic Houston – Camp Logan Chronicles*. As many of you know Louis Aulbach and I and our co-author Robbie Morin wrote a book, Camp Logan, Houston Texas, 1917-1919, that was published in 2014 highlighting the WWI US Army training camp that was built in the area that is now Memorial Park to train 45,000 soldiers before they headed to the war in France. Since the book was published in 2014 we have gathered much more information about Camp Logan AND just recently the Houston Chronicle Historical Archive, the digital microfilm of the Houston Chronicle newspaper went online. It dates from 1901 when the paper was founded through 2015 and it archives nearly every issue of the daily paper for over 110 years. Robbie has been searching this online archive and has come up with many little known stories of the camp that he has paired with his amazing collection of postcards and photos of life at Camp Logan, many of which we used in our book. You, too, can access this amazing Chronicle archive. You need to have a Houston Public Library card to log into the newspaper collection. See the section at the end of this article for instructions on how to log in to the newspaper website. Below is an example of the type of articles that highlight the daily activities of soldiers at the Camp. This one is especially timely since it talks about wearing masks! Be sure to read the second article, dated Sept. 20, 1918.

Camp Logan Chronicles – by Robbie Morin
Photos from Robbie Morin's collection

The Houston Chronicle, August 7, 1917:

American soldiers training in France are using French made gas masks. The men are put through testing with a mixture of a deadly vapor stronger than is used on the battlefields. Being taught rapid response and skillful mask use in extreme circumstances will help soldiers from succumbing to the gaseous effects.



The Houston Chronicle, September 20, 1918:

The Red Cross is collecting the pits from olives, peaches, plums, prunes and the shells from hickory nuts. Walnuts Brazil

nuts and other nuts will also be used to be burned into charcoal for making of gas mask filters

Charcoal from wood has found to be unsatisfactory. The Food Administration and Heads of Agriculture Departments are urging people to collect these items and drop them off at the Red Cross.

How to log in to the HPL newspaper archive website

The link to the HPL account for the Chronicle can be found here:

<https://infoweb.newsbank.com/resources/search/nb?p=AMNEWS&t=favorite%3A14DB39C1%21Houston%2BChronicle%2BHistorical%2BArchive>

Enter the link in your Internet browser. The first screen will ask you to log in with your user name and password. Click the link that says: **No username and password? Click here for additional log in options.**

That link will take you to a second screen that asks for your library name. Type "**Hous**" in the field and a drop-down list will provide a list of libraries. Select **Houston Public Library**. Then, enter your **Library card number** and click the Log in button. This will take you to the search screen for the Houston Chronicle archives.

Archeo Corner: What are Vertisols and their Implication to Archeologists?

Wilson W. “Dub” Crook, III

The precise vertical location or provenience of artifacts within a site is of critical importance to the archeologist. When a site is excavated, great care is taken to record data in stratigraphic context. Archeologists base their excavations on the geologic principle of superposition; cultural materials are assumed to have been deposited with the youngest closest to the surface and are progressively older with depth. This relationship is also assumed to have remained constant through time. This basic principle is based on the assumption that the soil is a passive entity in an archeological site. With the presence of vertisols, this assumption is not always correct.

A vertisol is defined as any soil with a high enough content of swelling clays (typically >30 percent) to cause a high degree of volume change with variation in moisture content. Swelling clays, such as the mineral montmorillonite, are formed in sheet-like crystal structures that can absorb extra water between the sheets of atoms. Because these soils have high clay contents, vertisols have a low hydraulic conductivity and require extended periods of precipitation followed by long periods of aridity to fully swell and shrink. When vertisols contract during dry periods, vertical cracks form in the soil that allows material from the surface to potentially move downward in profile. Rehydration during rainy periods causes re-expansion of the clays and the closing of the cracks. This action over time has the potential to disrupt and even destroy the stratigraphic context of an archeological site, at least within the zone impacted by vertisol cracking. This is the same geologic process that causes so much of the foundation problems (cracking) we experience in the Houston area.

Vertisols originate from calcium-rich materials including limestones, dolomite, and calcareous shales. Topographically, such soils are commonly found in lowlands and in areas that are gently rolling. In the United States, vertisols are particularly prevalent along the Gulf Coast in Texas, Louisiana, Mississippi, and Alabama. Vertisols have major implications not just for archeologists but also on plant growth. Due to the high degree of swelling and shrinkage that can damage tree roots, vertisols are not favorable for tree growth. This phenomenon is clearly present in the Pineywoods of Southeast Texas where trees grow most abundantly in well-watered areas such as along major streams and rivers but not in large open blackland prairie type fields.

For a soil to be classified as a vertisol, it must meet five criteria: (1) it must have at least 50 cm (20 inches) of sediment before reaching any lithic horizon such as bedrock, (2) it must have a clay content of greater than 30 percent to a depth of 50 cm or greater, (3) the clay minerals making up the soil must be known “swelling clays”, usually the mineral montmorillonite, also known as “smectite”, (4) there must be open cracks at some point in the year that are at least one cm (0.4 inches) wide and extend for at least 50 cm below the surface, and (5) micro-topography known as gilgai (small depressions in the soil) must be present.

Applications to Archeology

Vertisols are present in the surface soils of Southeast Texas but are restricted to the more clay-rich layers. Sand-rich zones which are also present across our region are more impacted by bioturbation, especially gophers and tree roots, than by vertisol action. Pleistocene soils such as the clay-rich Beaumont and Lissie Formations where exposed on the surface are impacted by vertisol cracking. However, these formations pre-date any human occupation of the region and the presence of artifact at or within their upper surface is due to erosion and not by the action of vertisols.

Archeologists also have to be aware of the presence of vertisols in a site and their potential downward displacement of artifacts into older layers. Any conclusions about the provenience of artifacts needs to account

for potential vertisol action and either recognize its presence or provide evidence that vertisol action has not interrupted the stratigraphic integrity of the site.



Common vertisol cracks in montmorillonite (swelling) clay-rich soil.
Note how easily artifacts from the surface could be displaced
to significantly lower depths.



Gilgai topography cause by the presence of swelling and shrinking clays in the soil.

Houston Archeological Society

Monthly Meeting Programs for 2020

**6:30pm Third Thursday of every month (except June)
Trini Mendenhall Community Center, 1414 Wirt Road**

We have started to conduct our Monthly Meetings virtually using Zoom. We had a successful meeting in July and have decided to carry on with that approach.

August 20th, 2020 – Ashley Jones - Cultural Resources Management Archeology. (Zoom meeting details to be emailed to members)

All **Houston Archeological Society** meetings are free of charge and open to the public. 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 September 2020 issue no later than 25th August 2020.

FOR MORE INFORMATION ON ARCHEOLOGY IN THIS AREA, CONTACT THE FOLLOWING:

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