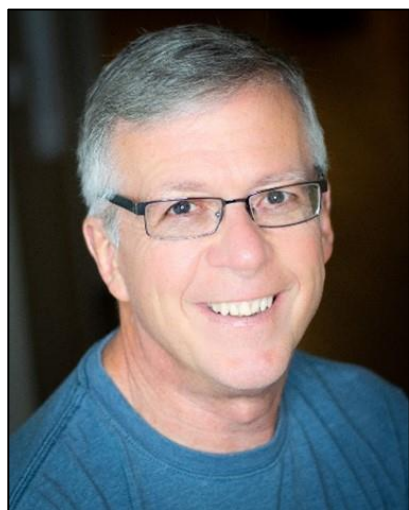




Thursday, October 15th, 2020, at 6:30 p.m.

“Archeological Excavations at Vindolanda Roman Fort on Hadrian’s Wall”

Dr. Gregg Dimmick



Dr. Gregg Dimmick will be the featured speaker at the Thursday, October 15th Houston Archeological Society monthly meeting. Dimmick will discuss his experiences excavating at the Vindolanda Roman Fort on Hadrian’s Wall in England. The ZOOM meeting will begin at 7:00 p.m. This virtual meeting will be for HAS members only. Watch for an email detailing how to join this ZOOM meeting closer to the date. The presentation will also be recorded and placed on the HAS YouTube Channel after the meeting for everyone to enjoy. Our Zoom host, Dr. Liz Coon-Nguyen, will open the Zoom meeting at 6:30p.m. for a few minutes of socializing.

Dr. Dimmick’s presentation will highlight his participation in excavations at Vindolanda, a Roman auxiliary fort just south of Hadrian's Wall in northern England. Archaeological excavations of the site show it was under Roman occupation from roughly 85 AD to 370 AD. Dimmick will give a short history of the fort and discuss the amazing anaerobic conditions at the site which have allowed organic artifacts to survive the last 1700 years. The methodology used at the site will be discussed and some artifacts discovered by his team will be shown.

Gregg Dimmick M D is a retired pediatrician who previously worked at South Texas Medical Clinics in Wharton TX. for 37 years. He is a 1974 graduate of Texas A&M University and a 1977 Graduate of the University of Nebraska Medical School. Dr. Dimmick is an avocational archaeologist and has coauthored two archaeological reports on excavations of the retreating Mexican army of 1836. He has participated in archaeological digs at the Fannin battle site as well as the San Jacinto battlefield. Dimmick has written: “Sea of Mud, The Retreat of the Mexican Army After San Jacinto, An Archaeological Investigation” which was published in 2004 by the Texas State Historical Association. The second edition was released in paperback in 2006.



Dr. Dimmick has appeared on the History Channel and the Discovery Channel in relation to his work on the archaeology of the Mexican army. He has spoken at various conferences on Texas History including the San Jacinto Conference, the DRT’s conference at the Alamo, the Alamo Society, and the Texas Philosophical Society. Dimmick has served for several years on the board of directors and as chairman of the archeology committee for the San Jacinto Battleground Conservancy.

Following his retirement Dimmick volunteered at archeological digs at Roman sites in Germany, York, England, and the Vindolanda Fort in England. He is also a member of the Houston Archeological Society and has participated in digs with the Society all over southeast Texas

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

President's Message – Linda Gorski

HAS members

I am so pleased and proud to announce the Houston Archeological Society Officers and Board of Directors for 2020 – 2021. These folks were elected to office following our Thursday, September 17th virtual ZOOM meeting and email balloting. Our officers are President: Linda Gorski; Vice President: Larry Golden; Secretary, Beth Kennedy; and Treasurer, Bob Sewell. Our three directors at large are Ashley Jones, Dub Crook and Frank Kozar. Thanks so much for voting for us and giving us the privilege of serving you and working with you to keep HAS at the forefront of Texas archeology! We also have several advisers to the Board who are absolutely invaluable to the running of HAS and some of those are introduced here too. If you have any questions about the Houston Archeological Society, please email me at lindagorski@cs.com



Linda Gorski, President



Larry Golden, Vice President



Beth Kennedy, Secretary



Bob Sewell, Treasurer



Ashley Jones, Director at Large



Dub Crook, Director at Large



Frank Kozar, Director at Large



Dr. Liz Coon-Nguyen
TAS Liaison



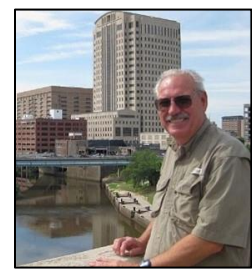
Sharon Menegaz, Education Advisor



Dr. Erin Phillips, Lab Advisor



Dr. Sarah Chesney, Field Project
Advisor



Louis Aulbach, Publications Advisor

Houston Archeological Society
Monthly Meeting
September 17, 2020

WELCOME to our HAS Monthly Meeting, held via ZOOM! This is our third meeting held online. Due to the continuing pandemic, we will be staying with virtual meetings for a while. **(Linda Gorski, President).**

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. Due to the pandemic, we have not been spending much money!

Membership Report (Bob Sewell): Our membership currently stands at 189, down from a maximum of 250 last year. Considering the pandemic situation, however, our membership count is good. Also, we usually add members near the end of the year. For those interested, we still have a couple of hats available for a \$10.00 donation.

Website and Newsletter Report (Bob Sewell): Our website is currently running well. Thanks to everyone who has contributed an article for our newsletter. Contributions have been terrific!

New Business:

Reports and Publications (Dub Crook and Louis Aulbach): Report #35 ("The Carrollton Phase Archaic: A Redefinition of the Chronology, Composition and Aerial Distribution of the Early Archaic Horizon Along the Trinity River") will be out this fall, as well as Journal #142 on general Texas archeology topics. In the first half of 2021, Journal #143 (Western U.S. archeology) will be available. If you still have not received your copy of the "Peopling of the Americas," please email Linda.

Voting for next year's Board of Directors: The new slate of officers for the upcoming years is as follows: Linda Gorski, President; Larry Golden, Vice President; Beth Kennedy, Secretary; Bob Sewell, Treasurer; Frank Kozar, Director at Large. Remaining on the Board to finish out three-year terms: Ashley Jones, Director at Large-One Year; Dub Crook, Director at Large-Two years.

How the voting was conducted (Louis Aulbach): Email ballots, along with instructions on voting, went out to everyone currently on record. So far, out of 84 responses, 82 have been in favor of the slate. The voting deadline is 10:00 p.m. tonight; results will go out in the next day or two in an email from secretary@txhas.org.

Annual Awards (Linda Gorski): September is the month our annual awards are given out. Our three winners this year are the following: Merit Award – to Larry Golden for his valuable contribution in almost single-handedly running our successful Ebay Auction to benefit TAS, his invaluable knowledge of almost all historic artifacts, and his contribution to our Lone Oak project through his positive interaction with landowner Stan Theut; Southeast Texas Research Award – to Bob Sewell for his contribution to research through his serving as field director at both the Arboretum and the Lone Oak Site (along with Sandy Rogers, Bob wrote the site proposal and facilitated the site registration), his management at the Lone Oak Site, which generates the information that aids in preparing the report, and for his maintenance of our website and newsletter. Lifetime Membership Award – to Louis Aulbach for keeping HAS at the forefront of Texas archeology through his knowledge of history and archeology around Houston and his work publishing our reports and journals (Louis is the "go-to" person for questions from other organizations concerning publishing).

Lone Oak Project (Linda Gorski): Work at this site is now open to our entire membership. Either Bob or Linda will email about dates. Note: the site is about a 1.5 hours' drive from Houston. This site covers the Prehistoric, Archaic and Paleo time periods and is our first truly archeological excavation in a long time.

Tonight's Program: Dub Crook, HAS member presented an update on the Andy Kyle Collection from Liberty County: "A Major Entrepot for Southeast Texas," with a focus on exotic trade items, their origins, and what they indicate about the Late Archaic and Woodland Period peoples in southeast Texas.

October Meeting: Dr. Gregg Dimmick will talk on his experiences excavating at the Vindolanda Roman Fort site near Hadrian's Wall in England.

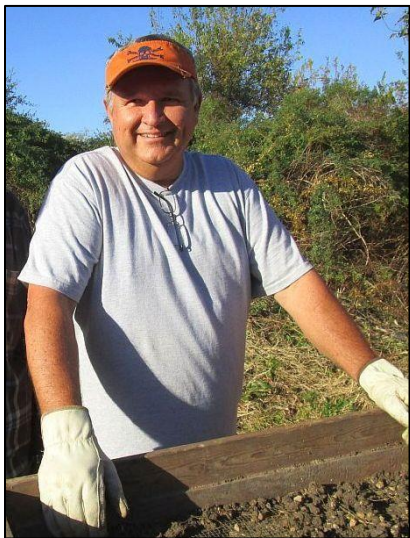
Beth Kennedy, Secretary

Houston Archeological Society Awards for 2020 presented virtually at September 17th Annual General Meeting

by Linda Gorski

Despite the fact that Covid-19 has curtailed most HAS activities since March 2020, several members have been busy keeping the society running and I would love to recognize all of them with special awards!!! However, three HAS members truly stand out for their contributions to the society in 2020 and received our three major awards at the September 17th Annual General Meeting - the HAS Merit Award, the Southeast Texas Research Award and the Lifetime Member (Fellow) Award.

HAS Merit Award – Larry Golden



The HAS Merit Award this year goes to HAS Vice President Larry Golden, one of our members who is invaluable to HAS for so incredibly many reasons including his ability to identify every historic artifact that is placed in front of him – instantly! And if you’ve been in the field with us, you know that we’ve taken advantage of his vast knowledge at many of our digs. Recently, another of his talents has come to the forefront. His knack for interacting with fellow landowners and collectors on a deeply personal yet professional level has become invaluable. He understands the important relationship that we, as professional and avocational archeologists, must maintain with private landowners. He recognizes that it is a privilege for us to be allowed on private land. And he never lets us forget that! He strives to be the intermediary between landowners, especially Stan Theut, owner of the Lone Oak Site, and the HAS Board and for that we are eternally grateful. Additionally, he almost single-handedly ran the enormously successful Ebay auction for the last five months to benefit the Texas Archeological Society which suffered an \$18,000 shortfall this year due to so many cancelled events. Through his efforts, we’ve been able to donate well over \$7000 to TAS through the auction. In recognition of Larry’s extraordinary efforts, an anonymous HAS member has donated a matching \$6,000 gift to TAS. That’s \$13,000

that HAS has been able to donate to TAS thanks primarily to Larry’s efforts.

The Southeast Texas Research Award – Bob Sewell

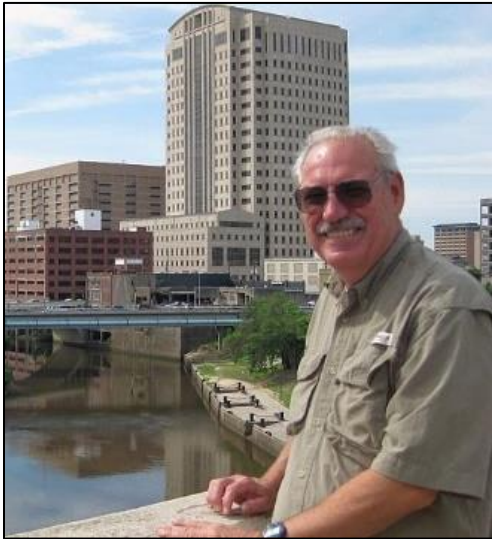


The Southeast Texas Research Award normally goes to someone who has contributed “outstanding sharing of special knowledge” to the membership of HAS. Past winners have included such illustrious members as Leland Patterson, Lawrence Aten, Dick Gregg, and even Harry Shafer!!! To many folks this means writing reports or doing strictly scientific research. However, this year the award is going to arguably the hardest working member of HAS, Bob Sewell. In addition to being the treasurer of the HAS Board, newsletter editor, webmaster and so much more, Bob has been the field director on our last several projects including the Arboretum and the current Lone Oak Project near Frelsburg. What does this mean? Well, for the Lone Oak project he wrote the proposal for the project. He registered the site

with the Texas Historical Commission. He prepared all the paperwork we’ve needed to document the project. He gets the gear out there – every time. He keeps the paperwork straight – every time. He supervises the digging and screening crews. He collects the artifacts and keeps them in a log. And because of his careful attention to detail, a comprehensive report on Phases 1 and 2 of the project is already underway and should be published next year. So, Bob Sewell is actually getting two awards this year. First, this SETRA Award plaque that he can hang on his wall and admire. Second, an engraved trowel which says “Robert Sewell, Field Director, Lone Oak Site 2020” in recognition of his amazing dedication to the work out there. The trowel is encased in a fabulous leather holster made by HAS member Ron Davis. Without Bob’s hard work in

the field and organizing the paperwork and artifacts, Dub Crook would not have been able to write the report on this site which will be “sharing special knowledge” to the members.

Lifetime Member Award – Louis Aulbach



The Lifetime Member (Fellow) Award is the highest award given by HAS and is presented to Society members who have given extraordinary contributions to HAS. This year the award was presented to Louis Aulbach who is responsible for keeping HAS at the very forefront of Texas Archeology in so many ways. Louis has a statewide reputation in both professional and avocational circles as being the “go to guy” for anything you need to know about the history and archeology of Houston. His 18 years of experience as the Records Management Officer for the City of Houston offers us first-hand knowledge of the rules and regulations we must follow when working in this area. He has published two books about Houston’s rich history that are considered the Holy Grail of local history and archeology. He has also published several paddling guides that include the history, archeology and geology of the rivers of West Texas including the Pecos, the Devils and the Rio Grande. He is in demand as a speaker all over the State on the subjects of history and archeology. He is also a member of the Texas Archeological Stewards Network. We are incredibly fortunate to have Louis as a member of our HAS team as he is also the publisher of all our Reports and Journals which, quite frankly, are the envy of

archeological societies across the state. In fact, as we enter into an ever more technical world, Louis is being consulted by other organizations around the state so that they, too, can enter the on-line publishing world. Louis Aulbach has been an invaluable member of the Houston Archeological Society for many years and joins other giants of HAS including Leland Patterson, Dick Gregg, Pam Wheat, and Dub Crook as a Lifetime Member.

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HAS Zoom Meetings for past Several Months now on YouTube

Thanks to HAS member Dr. Elizabeth Coon-Nguyen and her brilliant son Julian HAS now has a YouTube channel!!! <https://www.youtube.com/channel/UCn5-5YXMO2CwgO811GMFQow>

Each month after our third Thursday evening virtual Zoom meeting (which Dr. Liz hosts and records) the monthly program appears on YouTube. Therefore, you can already see Ashley Jones presenting a program on Cultural Resources Management Archeology, Louis Aulbach and Linda Gorski presenting a program on historical artifacts they have encountered and researched in the Big Bend of Texas, and Dub Crook’s terrific presentation last month on the research he and HAS members have done on the artifacts in the Andy Kyle collection in Liberty County.

Please tune in and subscribe so that you get notifications each time we post a new video.

Archeological Fieldwork to Resume at Lone Oak Site in Colorado County

By Linda Gorski

Many of you participated with us in excavations at the Lone Oak Site in Colorado County before the Covid-19 pandemic put a damper on fieldwork. A small crew (10 or less per CDC guidelines) has been working out at the site occasionally since May to complete Phases 1 and 2 of the project. HAS member Wilson W. “Dub” Crook is currently examining the data and writing the report on Phases 1 and 2 which will be available early next year.

On September 16th we finally opened work at the site to all HAS members and began excavations in the Phase 3 area. This is a very exciting site and a great way for old and new members to practice their archeological skills. As you know, many of the projects HAS members have undertaken in the past few years have been salvage archeology related – screening dirt and recovering artifacts at sites like the Kellum Noble House, Frost Town and the Arboretum. The Lone Oak site is offering us a real opportunity for archeological field work including shovel testing, laying out units, opening units, excavating, data recovery, and conducting an onsite field lab.

I will be sending out emails to the entire HAS membership about future work dates at the site so please watch for them! We are currently limiting attendance at this project to 20-25 people so when you receive my emails, it will be first signed up, first served as we continue to work on logistics. Please note that the Lone Oak site is in Colorado County, about 84 miles from my house in the Montrose area of Houston. It takes me about 1 hour and 30 minutes to get there. You will be required to sign a special Waiver for this project and follow a set of guidelines which will include having a face covering with you (which you will be asked to wear if you are working in close proximity to others). We will also be practicing social distancing as much as possible. HAS members ... please come and join us for this fabulous opportunity to Dig up Texas Prehistory – one Trowel Full at a Time!!!



We had an enthusiastic crew out at the Lone Oak site on Wednesday, September 16th when we reopened the site to all HAS members.

Preparing to Dig: Tools for First Time Archeologists

By Geoff Mills, Beth Kennedy

One of the main activities of an archeologist is to investigate the past by digging in the earth. Finding artifacts and often more importantly, studying the context of those artifacts helps establish a picture of the culture and way of life of our ancestors. Participating in an archeological dig is not like the clean “Indiana Jones” exploration we see in movies; actually, it often requires both long hours of digging in hot and cold weather, and adherence to certain standards. To achieve these standards and make the digging easier and more precise, the novice archeologist should have certain tools to use in the field.

The best piece of advice we received before we first went on a dig was not to rush out and buy a bunch of tools. The only tools you really need to start with are a trowel and a kneeling mat of some sort, and perhaps a small dustpan and brush. It is always best to see what the rest of the crew are using, then accumulate your tool set as needed. As for trowels, there are two types: pointed and rectangular. A pointed trowel, always associated with archeologists, can be regarded as the primary tool. Which trowel you use is a matter of personal preference and the type of excavation environment you are in.

Here is the official HAS list of recommended Field Gear:

- **Pointed Trowel:** A Marshalltown size 5 trowel is the standard model people go for. Look for it with masonry equipment at a hardware store, NOT in garden supplies.
- **Flat-nosed rectangular Trowel**
- **2m Folding Rule and/or 5m Metric Tape:** Make sure they are metric! It’s okay if they have standard and metric.
- **Line Level:** Plastic is fine, should cost about \$2.
- **Paint Brush:** Nice to have at least one, used is fine.
- **Small Hand Broom and Dustpan (you can buy a set for \$1 at the Dollar store)**
- **Flagging Tape (any color)**
- **String (any color)**
- **Toothbrush:** Great for cleaning off artifacts.
- **A small sharp bamboo or wood pick for working around bone**
- **Clipboard**
- **Work Gloves:** Leather or imitation leather gloves will work best. They can get worn out easily, so you may want to bring two pairs.
- **Small Root Clippers**
- **Sharpie Pen:** Black, fine point.
- **Pencils:** Mechanical or regular. Bring lots of cheap ones, they get lost
- **Knee Pads or Foam Gardening Pad:** This isn’t required but is *highly* recommended. You’ll spend a lot of time kneeling while you excavate and the ground can be very unforgiving.
- **Field Bag or tool kit:** People do different things here, most common is just an old school backpack. An electrician’s bag or tool bag can also be handy. Just make sure you have something that you can put all of your stuff in.

- **Compass:** If you are going to buy a compass make sure it is declination adjustable. If it is not you are out of luck. A good Silva compass is the best, particularly the Silva Ranger
- **Water bottle and water**
- **Field chair or stool**
- **Snacks**
- **Personal First Aid Kit**

Optional:

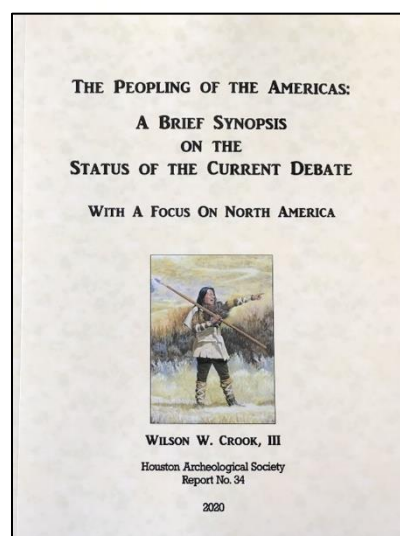
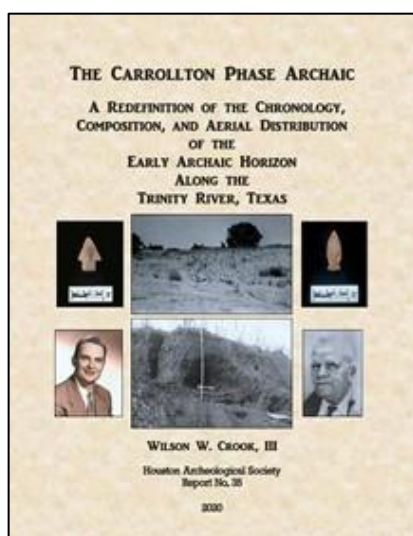
- **A bound field journal:** You may be required to keep a journal while in the field. The 6x8inch ones (composition books) with the black and white covers that most school bookstores sell is fine.

Other tools we recommend would be a straight edged spade, a small knife and a magnet, which is useful for historic sites. As mentioned, you will not need most of these items when you start but will accumulate most of them over time. There are key items you should have for your first visit to the field are a folding chair, a hat, sun protection, bug spray, and plenty of drinking water. Just keep in mind that we are in Texas, and weather conditions can change rapidly! Come prepared, and you will have a very enjoyable time!

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Newest HAS Publications Available now

HAS Members, if you have not received your complimentary copy of HAS Report No. 34, The Peopling of the Americas, A Brief Synopsis on the Status of the Current Debate with a Focus On North America by Wilson W. “Dub” Crook or the “hot off the press” Report No. 35, The Carrollton Phase Archaic: A Redefinition of the Chronology, Composition and Aerial Distribution of the Early Archaic Horizon Along the Trinity River, Texas also by Wilson W. “Dub” Crook, please email lindagorski@cs.com for instructions on how to obtain your copy. Since we are not meeting in person for a while longer, we have two distribution points for the reports or they can be mailed to you. For non-members, these Reports are available online at Amazon.com. The People of the Americas (\$15.00) and The Carrollton Phase Archaic (\$22.00). See – it really does pay to be a member of the Houston Archeological Society 😊



Notes on Munitions: A Benét Primed Cartridge Case

Part 2

By Tom Nuckols

The Colt Single Action Army Revolver

The Colt Single Action Army (Colt), also known as the Single Action Army, SAA, Model P, Peacemaker, Colt 45 or Model 1873, is a single action¹ revolver that holds six cartridges. It was designed in 1871 and manufactured by the Colt's Patent Firearms Manufacturing Company (founded in 1855, it is today's Colt's Manufacturing Company) of Hartford, Connecticut. From 1873 to 1892, approximately 38,000 Colts served as the standard U.S. military service revolver (see Figure 1).

Colts were also sold on the civilian market and wielded by almost every character, both good and bad, in western television series and western movies. Production of the Colt Single Action Army ceased in 1941 when manufacturing capacity was needed for the war effort. As a result of the popularity of western movies and western television shows, the Colt was reintroduced in the mid-1950s. Hundreds of thousands have been manufactured so far in three rimfire calibers and twenty-six center-fire calibers. The Colts overall appearance has remained consistent since 1873.

The U.S. military ammunition used in the Colt, was a .45 caliber, copper cased, Benét primed cartridge. The cartridge case did not contain a headstamp. Benét primed cartridges were manufactured at the Frankford Arsenal (1816-1977) a United States Army ammunition plant in Philadelphia, Pennsylvania. The cartridge had a rim diameter of 0.521 inches, a case length of 1.26 inches and an overall length of 1.44 inches. The cartridge held a 0.454-inch diameter, 250-grain lead bullet and contained 30 grains of black gun powder.

George W. Schofield and his Revolver

George Wheeler Schofield (1833–1882) had an illustrious U.S. army career. During the American Civil War, he served as a lieutenant colonel in the Union army, and after the war, he served with the 41st Infantry and the 10th and 6th cavalries. He is better known for a Smith & Wesson revolver named after him.

In 1871, Schofield, working in conjunction with the Smith & Wesson Revolver Company (founded in 1856, today's Smith & Wesson), developed a new and improved six shot revolver based on the precedent single action .44 caliber, Smith & Wesson American Revolver (American)².

¹ Single action (opposed to double action) means that a revolver's hammer must be cocked, usually with the thumb, and the trigger pulled every time a shooter wants to fire a shot. For a double action revolver, the trigger performs two functions. When the trigger is pulled, it both cocks and releases the hammer to fire a shot. double action revolvers can also be fired in the single action mode.

² The Smith & Wesson American Revolver, designed in 1870, was a .44 caliber, single action revolver that held six cartridges. It was called the American to distinguish it from the .44 caliber Smith & Wesson Russian revolver supplied under contract to the Imperial Russian Army beginning in 1871. In 1870, the U.S. Army adopted the American as the first standard-issue center-fire cartridge revolver in U.S. service. By the first quarter of 1876, only a few of the approximately 3000 revolvers purchased by the army were still in service. Harsh conditions in the field had taken their toll on the revolver's delicate internal parts.

The .44 caliber ammunition used in the American was an internally primed Martin, center-fire cartridge. Edward Martin was employed at the Springfield Armory doing experimental cartridge work. He invented what would become known as the "Martin primer" in 1869. Although both primers functioned similarly, the Martin primed cartridge, unlike the Benét primer, had a circular corrugation on the cartridge head's base, and did not require case crimps to hold it in place. Like the Martin primed cartridges, Benét primed cartridges did not contain a headstamp.

The new revolver became known as the Smith & Wesson Single Action Schofield Revolver (See Figure 2 and Figure 3).

The Scofield Revolvers improvements were subtle, and it looked just like the American. However, the major difference was in caliber; an upgrade to .45 caliber over the previous .44 caliber used in the American.

The Schofield revolver was manufactured from in two designations, the First Model and the Second Model. The Second Model was a slightly improved version of the First Model. Approximately 3,000 First Models were manufactured in 1875 and approximately 6,000 Second Models were manufactured in the years 1876 and 1877. Of approximately 9,000 revolvers manufactured, 6,000 were delivered to the U.S. Army. A total of 3,000 First Models went to the U.S. Army in August and September 1876, and 3,000 Second Models were shipped to the U.S. Army between March and June 1875. The Schofield revolver saw service in the Indian Wars, and they were reported in use as late as the Spanish-American War and Philippine Insurrection³.

A Problem, A Solution and an Upset Colt Firearms Company

As soon as the Schofield revolver was adopted by the army, a problem arose that required immediate attention before the gun could be issued.

The Scofield's cylinder was shorter than the Colt's. The .45 caliber cartridge used in the Colt was too long for the Scofield's cylinder. To avoid a potential ammunition distribution problem, a shorter .45 caliber cartridge was required, and subsequently manufactured by Frankford Arsenal (the subject of Part 1 of this article appearing in the September 2020 issue of the HAS Profile).

The army's decision to reduce the power of the original .45 caliber cartridge used in the Colt Single Action Army Revolver to accommodate a competitor's revolver upset the Colt Firearms Company. However, the army's decision was final.



Figure 1. The Colt Single Action Army Revolver. The Colt revolver required the user to eject and load one chamber at a time, as they rotated the cylinder to line each chamber up with the side-mounted loading gate. The green arrow points to the loading gate, the red arrow points to the ejector.

³ In 1892, the United States army replaced the Colt Single Action Army Revolver and the Smith & Wesson Schofield Revolver with the center-fire, .38 caliber, Colt M1892, double action, six shot revolver.



Figure 2. The Smith & Wesson Schofield Revolver.



Figure 3. The Smith & Wesson Schofield is considered a “top break” revolver. The arrow points to the ejector. Top-break revolvers had the ability to eject all empty shells simultaneously, and exposed all chambers for reloading.

ARCHEO CORNER: Artifact Chronologies for Southeast Texas

Wilson W. “Dub” Crook, III

In archeology, there are two ways to date an artifact. One is through dating material found in direct context with the artifact using a technique such as radiocarbon or Optically Stimulated Luminescence (OSL) age dating. This is known as an absolute date. However, absolute dating methods can be expensive, especially if you are trying to date multiple levels in a site that has a long period of occupation. It also requires a certain amount of datable material or, in the case of OSL dating, a geologic profile containing undisturbed sandy sediments. These may not always be present at a given location.

The other way to date archeological materials is through what is known as relative dating. Relative dating does not provide the archeologist with an absolute date but rather with an approximate time frame based on a vertical sequence. Relative dating is based on the basic geologic principle of superposition; in other words, artifacts are progressively older with depth. This of course, assumes that there has not been any disturbance of the stratigraphy through the action of vertisols or animals and plant roots (bioturbation). Stratigraphy plays a significant role in relative dating. If an artifact is found in a level below another artifact in an intact stratigraphic sequence, then it can be assumed that the lower artifact is older. If the site has a long occupational history, then a relative age chronology based on artifact types can be developed for the site. Once a vertical sequence of diagnostic artifact types is established, they can be compared to other sites in the region and then across regions. If one of the sites is able to date an artifact horizon or even several horizons, then sites which are not able to be dated can have relative dates based on similar artifacts occurring at similar depths. With enough sites providing dated sequences, artifact chronologies can be developed for a specific region.

In Texas, we have eight general archeological regions including (1) the Panhandle and the Llano Estacado, (2) Trans Pecos, (3) Lower Pecos, (4) South Texas, (5) Central Texas, (6) North Central Texas, (7) East Texas, and (8) our region, Southeast Texas. Over the last 90 years of archeological research in the state, chronologies of varying degrees have been constructed for each of these regions. Some regions, like Central Texas, have had extensive research and have a very well-defined artifact chronology. Other regions, such as North Central Texas and Southeast Texas, the regional chronologies are still being refined largely due to a lack of dated sites. An example of a newly proposed chronological sequence for North Central Texas developed by the author is shown below.

In general, the earliest Paleoindian occupations in the state are largely similar due to the fact that early populations were highly mobile hunter and gatherers and traveled large distance to hunt big game and to obtain high quality toolstone. These similarities begin to disappear with the end of the Pleistocene. In the early Archaic, some regions share artifact types but regional differentiation begins to appear as populations become less mobile and more sedentary. With regional differentiation, more artifact types are produced which while contemporary in time, are not shared across regions.

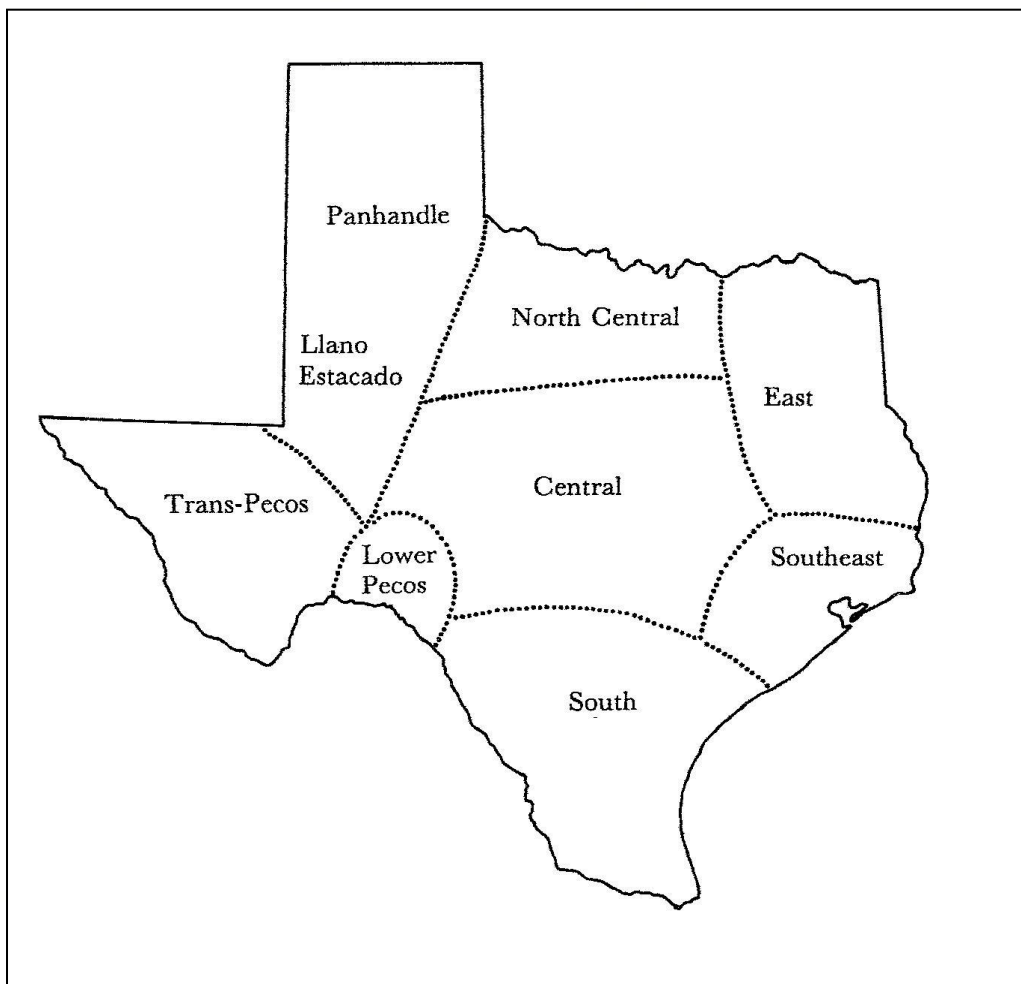
In Southeast Texas, HAS member Leland Patterson developed the first projectile point chronology between 1991-1996. His sequence is now being refined by the work being conducted by three HAS members: Jason Barrett at the Dimond Knoll site in west Harris County, Dan Worrall over much of the Upper Gulf Coast and specifically west of Houston, and by the author east of the Trinity River in Liberty County. What these studies are showing is that our region contains contact and influence from several areas. For example, west of the Trinity River, there is increased influence in point types from Central Texas. However, east of the Trinity River, the greater influence comes from East Texas and western Louisiana. There are very few age dates from Southeast Texas due to the lack of preservation of carbon material and bone. The relative dates given below are largely due to correlations with dated horizons in neighboring regions.

For Southeast Texas, the earliest artifacts are represented by Clovis points at ca. 13,500-12,700 B.P. This is followed by Folsom points (scarce for our area), then Dalton, San Patrice, and Pelican points (in that order) spanning the timeframe from about 12,500 to roughly 10,000 B.P. Late Paleoindian points in our region (ca. 10,000-8500 B.P.) include Scottsbluff, Angostura, Early Stemmed (Wilson), and Early Side-Notched (Big Sandy) points. The Early Archaic period (ca. 8500-6000 B.P.) is represented by Split Stem (Gower), Carrollton, Trinity, Wells, and Calf Creek Horizon (Andice, Bell) points – at least for the area near the Trinity River. In the Middle Archaic (ca. 6000-4000 B.O.), the western part of our region sees Pedernales, Williams, Bulverde, Wells, Morrill, and Lange points. East of the Trinity River, there is a continuation of

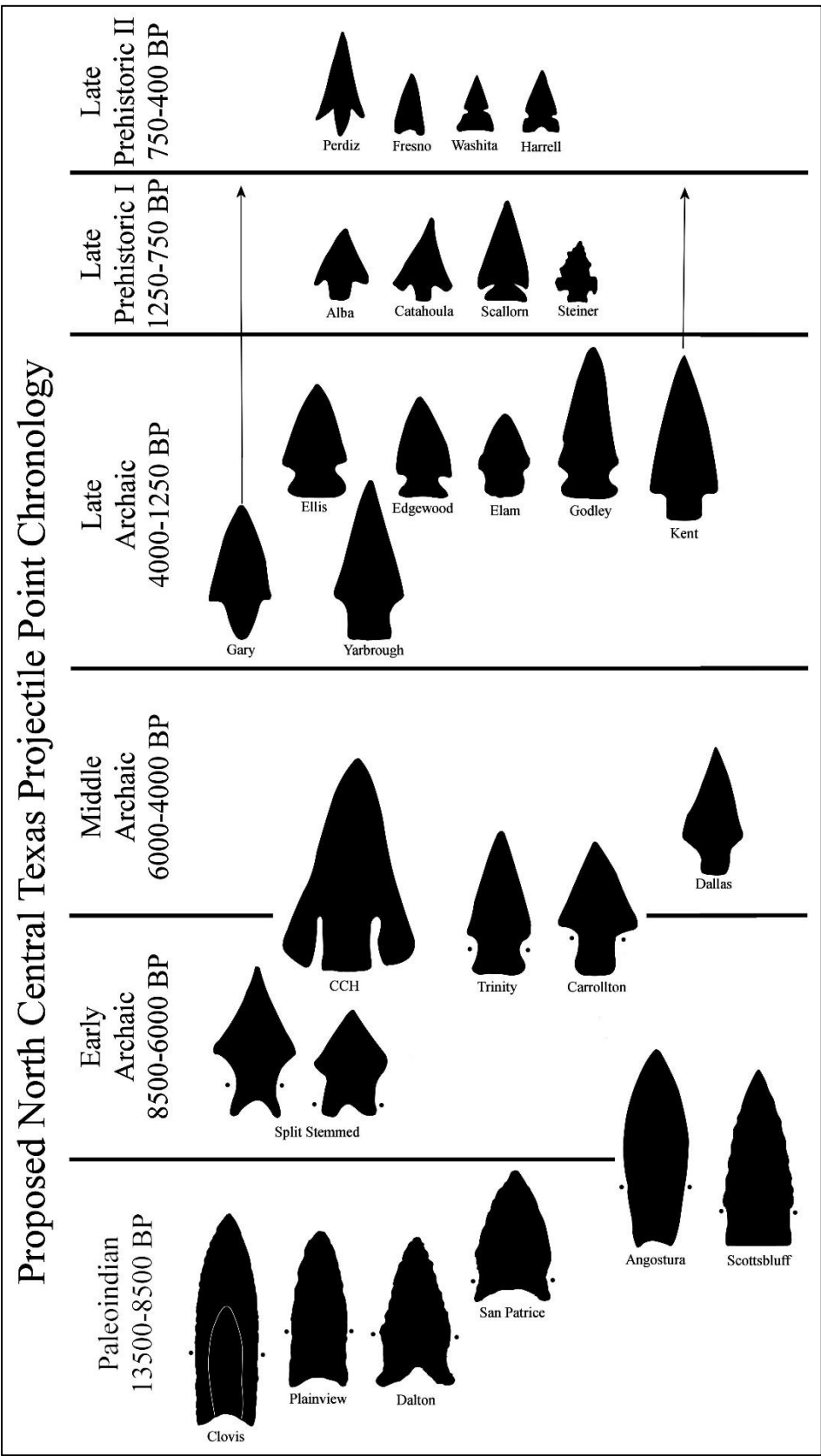
Carrollton, Trinity, and Calf Creek Horizon points plus the addition of Bulverde, Dallas, Williams, and double-notched Evans points from Louisiana. Some large Gary points may also have been introduced during the latter part of the Middle Archaic.

The Late Archaic period (ca. 4000-1400 B.P.) varies considerably across our region. In the earliest parts of the Late Archaic, both areas east and west of the Trinity River are characterized by the presence of Gary, Kent, Ensor, Ellis, Palmillas, Yarbrough, and Darl points. However, east of the Trinity, a Woodland period occupation comes into the region around 2500 B.P. which either replaces and/or admixes with the Late Archaics. The Woodland period introduces the first ceramics into the state which consist of crudely made, sandy-paste flat-bottomed vessels of the Goose Creek series (Goose Creek Plain, Goose Creek Incised, and many sub-varieties). Gary and Kent points are the predominant point types in this Woodland period.

The Late Prehistoric period (ca. 1400-500 B.P.) appears to have developed in place from the Late Archaic/Woodland cultures in the region and is characterized by the introduction of the bow and arrow and rudimentary agriculture. Typical arrow points types found in our region include Alba, Catahoula, Scallorn, and Perdiz. No Scallorn points have been reported from sites east of the Trinity in Southeast Texas and instead, there are Friley points from western Louisiana. Friley points are unique in that they are some of the only arrow points in North America that have up-turned instead of downward barbs. The sandy paste Goose Creek type pottery continues but there is the advent of grog-tempered (clay and crushed pot sherds) pottery (Baytown and San Jacinto series). There is also some trade with the Caddos in East Texas for higher quality, grog-tempered ceramics.



General Archeological Regions of Texas.
(after Turner and Hester, *A Field Guide to the Stone Artifacts of Texas Indians*)



The author's newly proposed chronological sequence for North Central Texas.

Houston History Chronicles – The Rifle Training at Camp Logan, Part 1: The Rifle Range

By Robbie Morin, Louis F. Aulbach, and Linda C. Gorski

This article is the first of a two-part excerpt from our forthcoming book on Camp Logan, a second volume entitled *The Daily Life of Soldiers at Houston's Camp Logan*.)

The soldiers who were sent to Camp Logan for military training were expected to achieve a level of proficiency in the care and use of the weapons assigned to them. This was especially true for the members of the infantry regiments, and to provide the necessary training in firearms, a rifle range was established as a part of Camp Logan. The rifle range was located about seven miles west of the main camp.

The Camp Logan Rifle Range consisted of two leases of about 1240 acres extending from Buffalo Bayou to just north of the modern Hammerly Boulevard, and from Witte Road to a line west of the modern Gessner Road along Conrad Sauer Road and extending south to Buffalo Bayou. The United States government leased the land for a combined rent of \$310.24 per month¹.

The companies of each regiment spent a week at the rifle range where each man had the opportunity to practice firing his rifle. Target practice scores were tallied and a level of skill in marksmanship was required for each soldier.

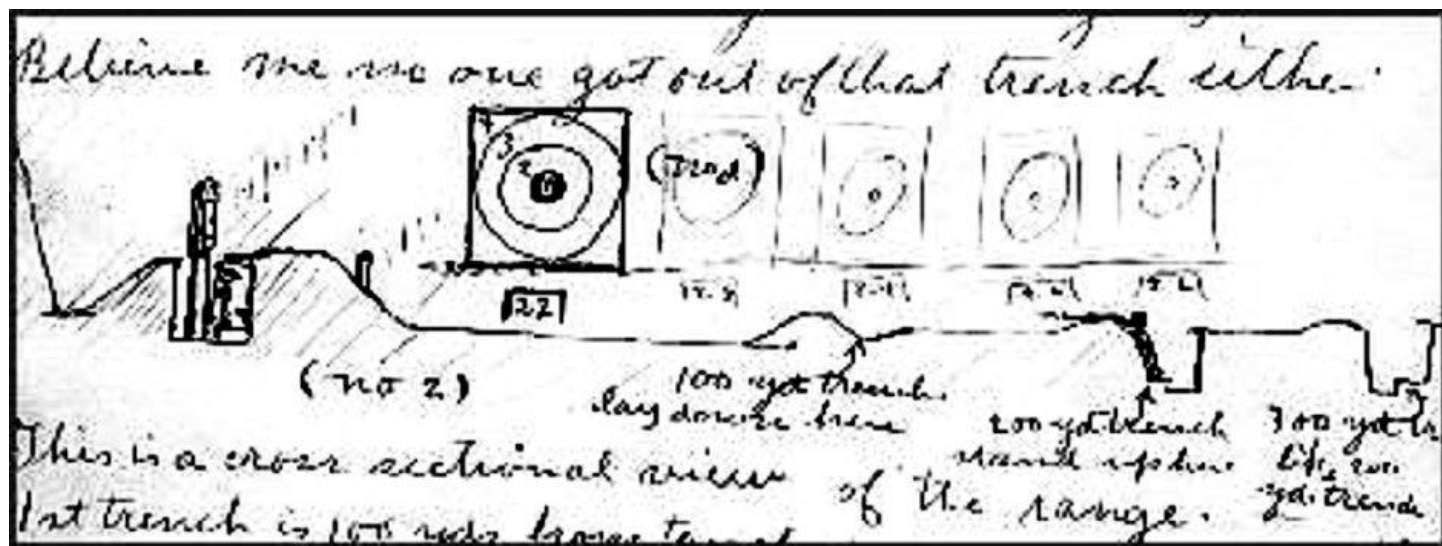


Soldiers firing from the trenches of the Rifle Range. (Source: Robbie Morin Collection)

The experience at the rifle range involved intensive training, yet the method of instruction and target practice held a fascination for some of the men, including Corporal Paul B. Hendrickson. He wrote about the rifle range training in detail and drew a sketch of the rifle range that shows the target trench and three firing trenches in which the troops were trained in marksmanship.

"Camp Logan, November 23, 1917

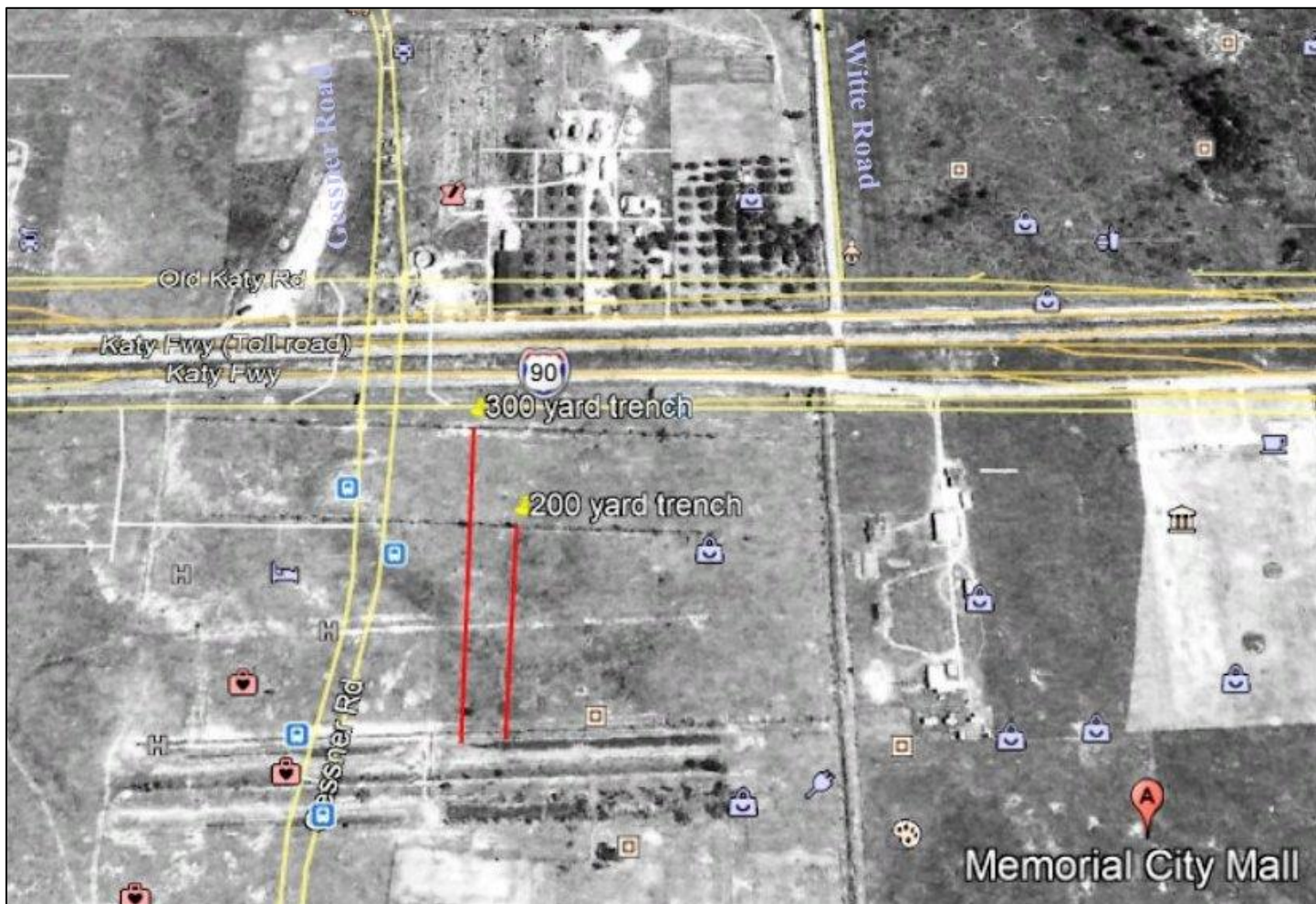
*This is a cross sectional view of the range. 1st trench is 100 yds from target - 2nd is 200 yds and the 3rd one is 300 yds. The target is a frame about 7 feet long and 6 ft wide. (No 1) shows how it looks to one shooting at it. The bull's eye is 8 in. in diameter. It sticks up above the ground or embankment just as in No 1 and each target is numbered. There are 300 of them in a row and that many men can fire at them at once. The trench the target is in is wood lined as the 200 & 300 yd. trenches are. only it has a board protection over the top. The target is on a little elevator and when you shoot at it the man pulls it down into the trench finds the bullet hole and pastes the hole shut and marks it and pushes the target up for next shot. target is white with black circles as in fig one. There is no chance for a bullet hitting the man in the trench. he would have to crawl out to get hit. The big bank at back is to stop all the bullets."*²



Sketch of the rifle range trenches by Cpl. Paul B. Hendrickson. (Source: Paul B. Hendrickson Collection)

Although nothing of the Camp Logan Rifle Range remains today, the remnants of the trenches were visible as late as the mid-1950's. An aerial photo from 1953 shows the traces of the trench system in the area of the current Memorial City Mall (see Figure 3).

In the aerial photo (shown below), the northern most trench is the 300-yard firing line. The second trench is the 200-yard firing line, and the southernmost trench is the target trench. The development of the Memorial City Mall in the late 1960's resulted in the complete loss of the trench system of the Rifle Range.



An aerial photo from 1953 shows the traces of the Camp Logan Rifle Range trench system. (Source: Google Earth)

Next month in Part 2, we will discuss the rifles fired by the troops at Camp Logan during their marksmanship training and the scoring procedures used to evaluate their proficiency.

Footnotes

1 Map Showing Leases, December 3, 1918. Constructing Quartermaster's Office. Camp Logan, Houston, Texas. 1918.

2 "World War I Story of Cpl. Paul B. Hendrickson. Letter of November 23, 1918." The Gill / Hendrickson Family History Homepage, accessed September 14, 2020, <http://www.jimgill.net/wwipages/letters/p171123m.html>.

Archeological Society

Monthly Meeting Programs for 2020

**6:30pm Third Thursday of every month (except June)
(Until further notice meetings are virtual for members only)**

November 19, 2020 – THC Marine Archeologist Amy Borgens, **Underwater Archeology on the Texas Gulf Coast.**

December 17, 2020 – **Annual Review highlighting HAS 2020 activities**

January 21, 2021 - Dub Crook - **The Anthropology of Hunting**

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 November issue no later than 25th October.

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

HAS BOARD MEMBERS

Linda Gorski, President, president@txhas.org
Larry Golden, Vice President, vpresident@txhas.org
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Ashley Jones, Director-at-Large, dal_c@txhas.org
Liz Coon-Nguyen, Director-at-Large, dal_a@txhas.org

TEXAS ARCHEOLOGICAL SOCIETY

Sandra E. Rogers, Region V Director, sojourne@att.net

AREA TEXAS HISTORICAL COMMISSION ARCHEOLOGY STEWARDS

Elizabeth Aucoin, ekpj.aucoin@prodigy.net
Louis Aulbach, lfal@att.net
Liz Coon-Nguyen, elizabeth.coonnguyenmd@gmail.com
Wilson “Dub” Crook, dubcrook@kingwoodcable.com
Bob Cresser, 281-341-5251
Debbie Eller, debajul@yahoo.com
Charlie Gordy, chasgordy@yahoo.com
Linda Gorski, lindagorski@cs.com
Bruce Grethen, bruce999@gmail.com
Sue Gross, suegbobs@comcast.net
Joe D. Hudgins, manso@jdhudgins.com
Kathleen Hughes, hughes.kathleen@yahoo.com
Brenda Jackson, brendajacks1@yahoo.com

Ron Jackson, ronj845@gmail.com
Beth Kennedy, bethiekennedy902@gmail.com
Don Keyes, keyes_don@hotmail.com
Sheldon Kindall, kindall1@peoplepc.com
Sharon Menegaz, smenegaz@rcseagles.org
Clint Lacy, clacy13@comcast.net
Tom Nuckols, tnuckols58@att.net
Sandra & Johnny Pollan, pollanone@sbcglobal.net
Sandra E. Rogers (Sandy), sojourne@att.net
Gary Ryman, ekryman@gmail.com
Steve Salter, salter4@hotmail.com
Bob Sewell, robert-sewell@att.net
Paul Spana, pcspana@comcast.net