Thursday, January 17th, 2019, at 7:00 p.m.
- Dub Crook

The first meeting of the Houston Archeological Society in 2019 will be on Thursday, January 17, 7:00 p.m. at the Trini Mendenhall Community Center located at 1414 Wirt Road in West Houston. Long-time HAS member, Wilson W. "Dub" Crook, will give a presentation on his recent research on Ancient Jericho (Tell Es-Sultan) entitled “The Conquest of Canaan: Who Were Those Guys at Jericho?”. The meeting is free of charge and open to the public.

Tell Es-Sultan or Ancient Jericho is one of the most excavated sites in the Middle East and yet it remains one of the most controversial. British archeologist John Garstang excavated the site between 1930-1936 and concluded that the city had indeed been destroyed in a single massive conflagration in the manner as described in the Biblical book of Joshua. Later in the 1950s, his protégé, Dame Kathleen Kenyon, continued his work on the site but instead concluded that Jericho had been destroyed about 150 years before the time of Joshua and thus the Biblical account was largely a myth. In the 1990s, Dr. Bryant Wood, himself an expert on Canaanite ceramics, relooked at Kenyon’s data and concluded that she had deliberately misinterpreted her own evidence and that Jericho had been destroyed by the Israelites in the manner Garstang originally concluded. Most recently, a joint Italian-Palestinian excavation has attempted to show that Kenyon’s conclusions were correct. While the interpretation of archeological excavations should be a matter of pure science with the data leading to the conclusion, unfortunately in a politically charged environment such as the Middle East, conclusions are often strongly influenced by regional politics.

Dub will discuss the history of all the previous work conducted at Ancient Jericho and then conclude with his own interpretation as to the date of the destruction of the city. As part of this work, Dub will talk about the two artifacts he recently uncovered at Jericho and their implications regarding a final occupation in the early part of the Late Bronze Age.

Mr. Crook is a Life Member (Fellow) of the Houston Archeological Society, a Life Member of the Dallas Archeological Society, a member of the Texas Archeological Society, a member of the Center for the Study of the First Americans, a Life Member of the Gault School of Archeological Research, a Research Fellow with the Texas Archeological Research Laboratory, and a Fellow of the Leakey Foundation. He is also an Archeological Steward for the State of Texas. He is the author of 135 papers in the field of archeology and has recently published his third book titled The Archeology and History of Paul’s Missionary Cities.

Parking at the Trini Mendenhall Center is free of charge. For more information about this meeting, please contact lindagorski@cs.com.
President’s Message – Linda Gorski

Happy New Year Y’all!!! I hope you had a fabulous holiday and are ready to get back to work with the Houston Archeological Society!

As many of you know, one of the main missions of HAS is public outreach and education. Last month Louis Aulbach, Bob Sewell and I taught an early morning class to the most amazing group of second graders at Awty International School here in Houston. These students are children of ex-pats from all over the world, but they were so well-prepared and eager to learn about archeology and how we dig up Texas history … one trowel full at a time! Well done teachers in preparing your students with lots of amazing questions … and answers!

The most exciting part of doing these educational programs in the school is the feedback we get. Check out a couple of the many letters these 73 second grade students wrote to us after the program. I think we have some budding archeologists in this group!

We’ll be working in the field at Kleb Woods Nature Center with two groups of students on January 18 and January 23 and I really hope you’ll join us. See more information about these education outreach days later in this newsletter. If you’re interested in joining us, please email me at lindagorski@cs.com
Welcome (Linda Gorski, President) New Members and Guests to the new meeting location at Trini Mendenhall Community Center!

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. The HAS Board will begin preparing the budget to be submitted to the membership in January.

Membership (Bob Sewell): We have 232 members for year 2018, which is a record number, and 46 members signed up for 2019. Memberships for 2019 are now being accepted. Anyone who has joined HAS since August is good for 2019.

New Business
Publications (Dub Crook): Members, please be sure to pick up your journals from the past several years, plus the current year. Check the sheet and see what you are entitled to. Next year, we will print a second Roman edition, probably in the first half of 2019; a compendium of Tom Nuckols’ articles on munitions; and a volume on general archeology topics. In 2020, Dub’s issue on western archeology (west of Texas) will appear.

Monthly Show and Tell (Linda Gorski): Celebrating the holidays, Larry Golden, Linda Gorski, Louis Aulbach and others put together a display of vintage toys you might have received when you were a child, or examples of toys we have recovered at sites like Frost Town. Also, Carl Belleri brought artifacts from Camp Logan for display.

Amazonsmile (Linda Gorski): Everyone watch for HAS to turn up as a recipient of donations from Amazonsmile. If you are buying Christmas gifts, please make HAS your non-profit choice. There will be an icon on the homepage of our website. Click on it to visit the Amazon website.

Projects
Klek Woods Archeology Project (Ashley Jones): We have two dates, both weekdays, on the books right now for public outreach digs – Friday, January 18, and Wednesday, January 23. Both are for school groups. We are doing real archeology at Kleb Woods and really need volunteers.

San Felipe de Austin (Linda Gorski): Sarah Chesney will be leading a shovel testing project this Saturday starting at 9:30 a.m. If you are interested in seeing how this works, come get a lesson and visit the museum and the fabulous gift shop to finish up your Christmas shopping.

Presidio la Bahia (Jack Farrell): Jack reminded everyone about the Presidio near Goliad that has a large collection of Colonial era ceramics plus coastal native artifacts displayed at the museum there.

January Program: Dub Crook will take us to the “shady side” of archeology to illustrate how politics in certain parts of the world affect conclusions about archeology. His presentation will be on Jericho, a site with many preconceived notions of the past.

December Program: Linda Gorski presented a power point highlighting the Society’s activities for 2018. As this is our special holiday meeting, everyone should take home all the leftover goodies brought by members!

Beth Kennedy, Secretary
The word “archeology” immediately conjures imagery of people working in large block excavations, carefully brushing and revealing artifacts until they can be safely whisked away to a lab – or museum – somewhere. These types of excavations are labor intensive, but highly satisfying and educational. Why don’t we do excavations like these all of the time? And why are some sites excavated, while others are left buried?

The very act of archeology is destructive. We take shovels, remove items from their context (the depth at which they are buried, the soils they are in, and the objects that they are next to), and take the items to a different location. Once an excavation is underway, none of the material culture recovered, the soils, roots, etc. can be placed back into its original position. Since our excavations will destroy this portion of our past, archaeologists ask why a site should be excavated. And to answer that question, professional archeologists look to our code of conduct – our professional ethics.

There are many state and national organizations that provide a code of conduct for archeologists. If you have noticed “RPA” in some professional archaeologists’ signature lines, the acronym indicates that they are members of the Register of Professional Archaeologists, and have agreed to practice under strong professional standards (www.rpanet.com or www.archaeologicalethics.org/code-of-ethics). The Society of American Archaeology asks its membership to follow the Principals of Archaeological Ethics (www.saa.org) and the Society for Historical Archaeology has their own ethical standards (https://sha.org). Texas Archeological Society, the Houston Archeological Society, and the Texas Archeological Stewards all have their own code of conduct. These codes assist us in making sure that we act responsibly as stewards of the sites we excavate, the artifacts we collect and curate, and the information we disseminate about the site.

This column will provide information on the laws, regulations, methodologies, and other standards that informs archaeological best practices. The topics that will be covered include:

- The why and how of obtaining a permit to conduct archeological investigations in Texas
- Federal regulations that guide archeological practice
- The phases of archeological field investigations
- When to excavate – and when to avoid – an archeological site
- The purpose of research questions
- Curation and reporting
- Stewardship

If there are any other topics you would like to hear about, please let us know.
Passport in Time Projects with the US Forest Service

Houston Archeological Society members are again being offered the opportunity to work with the US Forest Service’s Passport in Time project in Davy Crockett National Forest. The dates for this year’s projects are February 10 - 15 and February 17 - 22, 2019. You must commit to one complete session and 20 volunteers are required per session.

According to Will Reed, PIT National Coordinator, "The goal of PIT is to preserve the nation's past with the help of the public. As a PIT volunteer, you contribute to vital environmental and historical research on public lands. Your participation helps us not only to protect and conserve the sites, memories, and objects that chronicle our collective past, but also to understand the human story in North America and ensure that story is told to our children and grandchildren. We cannot do it without you!"

The Davy Crockett National Forest is located in the Piney Woods of East Texas, approximately 80 miles west of the Louisiana state line and two hours north of Houston. There are many interesting historic and prehistoric sites in or near the Forest, including mounds, prehistoric camp-, work-, and resource-gathering sites; historic homesteads, logging trams, and sawmill ruins; and structures built by the Great Depression-era Civilian Conservation Corps (CCC). Last year several HAS members including Liz Coon-Nguyen, Beth Kennedy, and Sandy Rogers participated in the Passport in Time project at DCNF. For complete information on this project check out the website at http://www.passportintime.com/davy-crockett-nf-site-survey-2019.html
Public Outreach at Kleb Woods continues in January 2019
By Linda Gorski

Digging Old Stuff Day at Kleb Woods in November 2018 was an enormous success thanks to all the terrific HAS volunteers who were on hand to work with our visitors. Thanks to all of you!!!! We have several events already scheduled for Kleb Woods in the coming year and two of those will be held in January 2019 and we need your help! If you can volunteer to work with us on Friday, January 18 and/or Wednesday January 23 you would be adding so much to our public outreach efforts – plus you’ll get to dig up Texas history yourselves - one trowel full at a time! We’ll be working with students from two different local schools, opening at least two units, screening dirt and running a field lab. Please email me at lindagorski@cs.com and let me know if you will be available either or both of those days.
Notes on Munitions -- Chewed Musket Balls by Tom Nuckols

Thomas Barnett was born in 1798 in Kentucky. In 1823 he came to Texas as one of Steven F. Austin’s Old Three Hundred colonists. Barnett took an active part in Texas Colonial and later Republic of Texas politics (Kemp 1952: 112). He built a log cabin home near what would later become the City of Rosenberg. During the Texas Revolution, Santa Anna’s Mexican army burned his home to the ground. After the revolution, Barnett rebuilt his home and died there in 1843. He was buried in the family cemetery nearby.

About 2010, the Fort Bend Archaeological Society (FBAS) conducted excavations at the Barnett Site (41FB326). These excavations uncovered forty-four munitions artifacts including a lead musket ball (Catalog #926). The musket ball weighed 436.2 grains, had a mean diameter of 0.673”, and its surface was covered in what appeared to be teeth marks. An FBAS member believed it had been chewed, as in “bite the bullet” chewed. The term “bit the bullet” originated from the era of muzzle-loading firearms when it was thought that wounded soldiers in field hospitals were given a lead bullet to bite on or chew to endure the pain of operational procedures, such as amputations.

In the 1990s, archaeological investigations were conducted on the U.S.-Mexican War (1846-1848) battlefield site (41CR92) of Palo Alto near Brownsville, Texas. Three lead balls of .30, .52 and .69 caliber with teeth marks were found in the area of the Mexican battle line.

“Unlike all the other lead balls found at Palo Alto the one with teeth marks possesses a certain poignancy.” Bitten and chewed musket balls are occasionally found at military encampments of the period. Several such bullets were found on a Revolutionary War site; their discovery theorized that they “were given to culprits in the army that they might chew them to ease their agony while being flogged.” This particular lead ball, of Mexican caliber (.69) and found on the Mexican battle line, may have been bitten by a wounded Mexican soldier while he received some medical attention, or chewed on to relieve tension” (Haecker and Mauck 1997: 141-142).

I have never put much stock in the supposed reasons for the adage “biting the bullet”. What then made the teeth marks on the Barnett site musket ball and the Palo Alto battlefield bullets? Based on what I’ve read in a recently purchased book by battlefield archeologist Daniel Silivich (2016), I’m going to say animals. In Chapter 7, “Chewed Musket Balls,” Silivich states, in the sections below, that the culprit of many misidentified chewed musket balls are swine, large rodents or deer.

Swine-Chewed Musket Balls

“Swine have very powerful mandibles and very strong teeth. They are one of the few species that can crush, eat and digest bone, including human bone. Why would pigs chew on musket balls? Pigs use their snout to root for food such as acorns, nuts, tubers, and other edibles that fall on or are buried in the ground. It could be days to decades after a military event occurred that either domestic swine of wild boars came through the area looking for food and could pick up and unintentionally chew a musket ball instead. Many conflict areas were farms and continued to be farmed long after a battle took place. Campsites or engagements in remote areas were also
subject to wild boars roaming for food. The southern United States today has a severe problem with wild boars being a threat in rural populated areas (Sivilich 2016:102).”

Large-Rodent-Chewed Musket Balls

“Rodent-chewed musket balls are another common type. Large rodents such as rats and squirrels use their front incisors to gnaw objects. Rats will gnaw on many different materials. Squirrels have also been known to specifically eat lead such as lead flashing around older vent pipes on roofs” (Sivilich 2016: 105)

Deer-Chewed Musket Balls

“Pigs and rodents are not the only animals that chew on musket balls. Other animals looking for food, such as acorns, can accidentally pick up a musket ball and chew on it (Sivilich 2016: 107)”. Further Evidence for Animal Chewed Musket Balls

Heavily chewed musket balls were excavated at the Smith’s St. Leonard site, an early eighteenth-century plantation at Jefferson Patterson Park and museum in Maryland. The markings were identified as being from a swine. A pig tooth recovered from the site was split in half. Embedded into the crown of the tooth was a fragment of white metal that visual and X-ray examination determined was probably lead (Sivilich 2016: 104-105).

Dana Linck, a professional archaeologist has studied musket balls excavated in the 1960s at Fort Montgomery, New York. The site has several large oak trees and large quantities of acorns were noted during excavations. Linck noticed unusual curved dentition impressions on one of the musket balls. Suspecting that the marks might be from a deer, he used a deer jaw with a complete set of teeth, he impressed the teeth into clay balls. He successfully duplicated the horseshoe-shaped markings on the musket ball and concluded that it was possibly chewed by a deer (Sivilich 2016: 107-108).

Although Silivich’s Musket Ball And Small Shot Identification, A Guide provides the reader with plenty of evidence for animal chewed musket balls, he doesn’t completely discount the case for human chewed musket balls, devoting nine pages to the subject in Chapter 7. I encourage anyone with an interest in munitions to read this well illustrated book, $35 paperback.

References

Haecker, Charles M. and Jeffrey G. Mauck

Kemp L.W.

Sivilich, Daniel M.

1 Several times over the past few weeks and even while writing this article, a squirrel has been chewing on the lead flashing surrounding the master bathroom exhaust vent on the roof of my 1950s era house. The din created inside the house by this activity is quite annoying. It only requires that I go outside and stare at him for him to quit. He goes bounding across the roof and jumps onto a nearby tree.
Native Plants of Texas – Then and Now: The Pecan Tree
By Beth Kennedy

One of the most nutritious, abundant and popular nuts grown in the United States is the pecan. Pecans are delicious eaten either raw or roasted, and, during the holiday season, add to the enjoyment of foods, particularly in Texas and across the South, such as pies, cookies, candy, and even sweet potato casserole! In fact, the popularity of pecans as a food source both in the United States and other countries such as China, Mexico, Canada, the Netherlands and the U.K. has led to the United States yearly producing 80% of the world’s pecan crop, with Texas, Georgia, and sometimes New Mexico vying each year as top contributor to this statistic (Marzolo 2015). In Texas, the native pecan tree has long played an important and interesting role in both the history and economy of the state, a fact which led to the 1919 Texas Legislature, and then-governor William Pettus Hobby, aptly naming the pecan as the state tree!

The pecan tree is a member of the walnut family, its genus, Carya, meaning “nut-bearing tree,” and its species name, Illinoiensis, indicating the state of Illinois, located at the northeastern edge of the pecan’s native range, a geographic area from which traders in the 18th century transported the nuts to the Colonies, hence the name “Illinois nuts” (Turner 2009). It is native to the Southeast United States, particularly in the area of the Mississippi River Valley, Oklahoma, and along streambeds in East and Central Texas, as well as northern Mexico. The pecan is the largest of the hickories, growing typically 70-100 feet tall, with the trunk reaching up to 4 feet in diameter, although the tree can often reach 150 feet with a 6-foot trunk diameter. The leaves vary from dark to yellow-green, and the nut is oblong with a thin husk that splits open at maturity. The native pecan thrives in environments of full sun, plenty of water, and a moist, rich soil in which the roots can spread to twice the area of its branches, and up to 40 feet in depth (Sharpe 1969). With the right growing conditions, and considering that the pecan is a biennially-producing plant, in “good” years some trees have been known to produce up to 500 pounds of pecans (Hall 2000)! Additionally, the trees provide food for a variety of wildlife, including white-tailed deer, raccoons, opossums, squirrels and birds, and is the larval host of the gray hairstreak butterfly.

Evidence of use of the pecan presumably as a food source in the United States dates back some 8000 years. In Texas, physical evidence of pecans has been found in Baker Cave, in Louisiana at the Copes Site, and in Illinois at the Modoc Rock Shelter (Hall 2000). Moving ahead some 4000 thousand years, burned rock middens from the second millennium B.C.E. in Central Texas show evidence of the processing of pecans, along with acorns and walnuts. The answer to the question of why pecans have been so valued as food, other than the fact of their abundance, has to do with the nutritional value of the nut. Pre-Columbian societies in North America depended on lean meat sources, such as bison and deer, as opposed to fattier meat sources such as cattle and hogs, introduced later by Europeans. The gathering of nuts, however, provided a much more nutritionally valuable source of protein, fatty acids, and minerals (Turner 2009).

The earliest explorer to report on the importance of the pecan in Texas was Cabeza de Vaca, around the year 1530. He wrote that south Texas Indians would travel 100 miles or more to harvest pecans, mainly along riverways, and that they subsisted on the pecan for several months. De Vaca even mentioned that the pecan saved him from starvation. Later, in 1689, Alonso de Leon, a Spanish explorer who made several trips along the
northeast area of New Spain in the late 1600’s named the Nueces River for the abundant pecan trees growing along the waterway. The word *nueces* originally referred to the walnut; however Spanish accounts indicate that the trees along this river were most likely pecan, a word derived from the Algonquian language meaning “a hard-shelled nut” and first recorded by early 18th century French explorers as “pacanes or pecanes” (Turner 2009).

Texas Indians in historic times, including the Bidai, Caddo, Coahuiltecan, Comanche, Kickapoo, Lipan Apache, and Tonkawa, used the pecan as a food source. One branch of the Coahuiltecans, the Payaya, were known to store unshelled pecans in underground pits, preserving them for consumption throughout the year; the Tonkawa made pemmican of ground-up bison, venison and pecan, and later in the 19th century, used pecans for bartering with early Texas settlers. As the 19th century wore on, the pecan increased in value to incoming Texans: the nuts were transported to Houston for shipping to the North, and after the Civil War, pecans in parts of Texas were considered more valuable than cotton. One fact of note is that African American slave gardener Antoine (he had no last name) is credited with the first successful pecan graft, occurring in 1846. This occurred at the Oak Alley Plantation in Saint James Parish, Louisiana, owned by then-governor Telephore J. Roman (Turner 2009).

Ironically, in the early 20th century, the abundance of the pecan tree almost led to its demise! The extensive groves of trees were chopped down for the planting of cotton, which had enacted a “come-back” by that time, as well as to obtain the fine, hardwood the trees produced! Although in the early 1900’s, the majestic groves of native pecan trees were decimated, two pecan growers, F. A. Swinden and J. H. Burkett, were experimenting with new varieties, and at the same time, planting new groves. Some of the credit for rescuing the pecan must also be given to the late 19th century Texas Governor James S. “Big Jim” Hogg, who requested that upon his death, he wanted his children to plant a pecan tree planted at the head of his grave. This request helped stir the interest of the 36th Texas Legislature, in 1919, to name the pecan the state tree (Sharpe 1969). Today, the pecan industry, in both native nuts as well as cultivars, is thriving. It is truly an important player in the ethnohistory and economy of Texas!

**Sources**

[https://texasmonthly.com/the-culture/the-pecan/](https://texasmonthly.com/the-culture/the-pecan/).  
HAS Memberships for 2019 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

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!!!!
Monthly Meeting Programs for 2019
7:00pm Third Thursday of every month (except June)
Trini Mendenhall Community Center, 1414 Wirt Road

February 21, 2019 - Dr. Tom Williams - Update on pre-Clovis artifacts recovered at the Gault Site.

March 21, 2019 - Elton Prewitt, Painted Pebbles of the Lower Pecos Canyonlands

April 18, 2019 - Jeffrey Girard, Discovery and Recovery of a 14th Century Dugout Canoe on the Red River

May 16, 2019 - Dr. Jason Barrett, Trade Trails and Meeting Locations in SE Texas Prehistory

June – No meeting due to TAS Field School

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 no later than January 25th for the February 2019 issue.

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