Thursday, January 19th, 2017, at 7:00 p.m.
“Sourcing Turquoise Using X-ray Fluorescence”
Wilson W. “Dub” Crook

Please join us for the Houston Archeological Society’s first meeting of 2017 on Thursday, January 19th, 2017 at 7:00 p.m. at MD Anderson Hall, on the campus of the University of St. Thomas. HAS member and mineralogist, Wilson W. “Dub” Crook will present a program on “Difficulties in Sourcing Turquoise using X-ray Fluorescence”. The meeting is free of charge and open to the public.

X-Ray Fluorescence (XRF) analysis is an analytical technique well-suited for sourcing some archeological artifacts, such as obsidian, where geologic sources can be distinguished using a small suite of elements. However, when applied to other more complex minerals found in archeological contexts, such as turquoise, XRF has had mixed results in trying to determine their source. As a result, researchers have tried a number of other methods to source turquoise, all of which are partially or completely destructive to the artifact being analyzed.

Recently, three artifacts of turquoise, including two beads and a small pendant, have been recovered from the Branch site (41COL9) in Collin County. In an effort to source the turquoise, Dub Crook has used a more complex multi-element analysis in an attempt to develop a non-destructive trace sourcing methodology. This talk will discuss the difficulties in sourcing a complex mineral such as turquoise using XRF and its potential for sourcing similar artifacts found in Caddo sites across East Texas.

Mr. Crook has used his educational background in mineralogy and crystal chemistry in his work on turquoise. He 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 the author of over 90 papers in the field of archeology and has recently published a book of the Late Prehistoric of the East Fork of the Trinity.

For a campus map of St. Thomas University, go to www.stthom.edu and look for the Interactive Map, Building 20, Anderson Hall. Street parking is available as well as paid parking in Moran Center Garage at the corner of West Alabama and Graustark. For more information about this program or about the HAS, please contact Linda Gorski, at lindagorski@cs.com.
President’s Message

Happy New Year everyone! I hope ya’ll have recovered from the holidays and are ready to dig up Texas history with us - one trowel full at a time - in 2017 😊. We’ll start the New Year off right with a weekend at the Frost Town site. Watch for an email from Bob Sewell highlighting the dates and times.

I am sure that many of you are aware of the expertise HAS members bring to the society. Many of them have written articles in the Profile on their particular areas of interests. For instance, we have experts in bottles, marbles and pottery (Larry Golden), munitions (Tom Nuckols), lithics (Dr. Jason Barrett and Dub Crook), bones and faunal material (Dr. Gus Costa), ceramics (Beth Aucoin and Sue Gross), military artifacts (Douglas Mangum and Charlie Gordy) and many, many, many more including historian Louis Aulbach who at a moment’s notice can answer almost any question about the history and prehistory of Houston.

To share all this expertise, we are considering starting a new column in *The Profile* where we will highlight an unidentified artifact (maybe we’ll call it a “Whatzit”). I don’t think anyone realizes how many calls we get each month asking us to identify artifacts or fossils that folks have recovered as they hike on their ranches, walk on McFaddin Beach, or inherit in collections left by family members. We also frequently recover artifacts that stump us during our own excavations and projects.

For instance earlier this year one of our members, Marcel Frey, brought us a collection of points from a ranch in South Texas that one of his clients had asked him to identify. We gave the collection to Dub Crook and not only did he identify each item in the collection, he also wrote a terrific article for the HAS Profile about the collection entitled *The R. Donald Patton Artifact Collection*. This article can be found in the September 2016 issue of *The Profile* at [http://txhas.org/PDF/newsletters/2016/2016%20September%20Profile.pdf](http://txhas.org/PDF/newsletters/2016/2016%20September%20Profile.pdf)

So, if you have an artifact you’d like us to research and write about, let us know! Just take a photo and send it to me at lindagorski@cs.com and I’ll forward it to the right person. You might see it in one of our future newsletters!!! Better still, if you have an area of expertise let me know so we can refer some of these questions to YOU!

Happy New Year! Hope to see you at the January 19th meeting.

- Linda Gorksi, President Houston Archeological Society
Minutes
Houston Archeological Society Monthly Meeting
December 15th, 2016

Welcome new members and guests - Louis Aulbach, Vice President standing in for Linda Gorski

Treasurer’s Report: Bob Sewell reported account totals and stated the society has no major bills outstanding. Account totals will no longer appear in monthly newsletter. Anyone wishing more information should contact Bob.

Membership: Bob Sewell reports 229 members (4 new tonight)! Our Membership Drive for 2017 begins tonight. Membership forms are at back. All new and renewing members get a bumper sticker and a copy of the newest HAS Report and Journal. See Bob after the meeting to either join or renew. Louis is giving out new journals!

New Business
Lab report: We will not have lab at Rice for the rest of 2016 due to busy schedules. We will begin labs and workshops at Rice in 2017. Dr. Gus Costa says we are moving toward workshops on special subjects. Any members with expertise on a topic please email Dr. Costa about doing a lab.

Journals: Dub Crook announced the Rice student journal is out tonight and is dedicated to research led by Dr. Costa. Publications are over for 2016. Beth Aucoin and Dub Crook are working on a publication for the Kellum-Noble House for 2017. Dub states that there has been a good amount of research by HAS members on Roman Etruscan archeology that will be put into a journal. We should have 3 or more publications in 2017. Anyone wishing to publish should see Dub, who will work with you on a paper.

Projects
Frost Town: Bob Sewell reports we are continuing to screen dirt from piles C, D, E and F at this site and are continuing to find remarkable artifacts. Members will be kept advised on future dates!

Kleb Woods Public Archeology Project: Ashley Jones will be our PI. We will probably start with GPR/magnetometer surveys of the site in late January/early February 2017. This will be an Archeology 101 course for the interested public!

Cotton Field Site: Dr. Barrett reports December 10/11 were last dates for work at this site. He will be working on the site report. Labs on artifacts will continue in 2017.

Program: Louis Aulbach presented a talk on HAS activities in the past year: Cotton Field, Kleb Woods, San Felipe, Civil War artifacts, Wallisville, and Frost Town. Thanks to Dub and others for donation of the dino-lite microscope!

Program for November: HAS member and mineralogist Wilson W. “Dub” Crook will present a program on Difficulties in Sourcing Turquoise Using X-Ray Fluorescence. Recently, three artifacts of turquoise, including two beads and a small pendant, have been recovered from the Branch site (41COL9) in Collin County. In an effort to source the turquoise, Dub has used a more complex multi-element analysis in an attempt to develop a non-destructive trace sourcing methodology. This talk will discuss the difficulties in sourcing a complex mineral such as turquoise using XRF and its potential for sourcing similar artifacts found in Caddo sites across East Texas.

Next meeting will be 19th January, 2017

-Beth Kennedy, Secretary, Houston Archeological Society
THE PAST AND FUTURE OF HAS INVESTIGATIONS AT COTTON FIELD (41CD155)
Dr. Jason W. Barrett

INTRO
These are not the last words that I will write on Cotton Field, even as field excavations at the site have finally come to a close after three incredibly rewarding years. In fact, the vast bulk of my writing lies ahead of me. My point in mentioning this is that there will be another time and place to properly acknowledge the many people that have contributed to the achievements of this great project. However, in this article, I would be remiss to leave unmentioned the contributions of the HAS, without whose continuous support this project truly would not have been possible.

HISTORY OVERVIEW (10 Feb 2014 – 11 Dec 2016)
Cotton Field, located on the Tait-Huffmeyer Ranch near Columbus, Texas was discovered on February 10, 2014. Subsequently the site became the central focus of prehistoric excavations for the 2014-2016 Texas Archeological Society Field Schools. Following the rain-shortened 2015 field school, I decided to continue excavating at the site one weekend per month, opening those excavations to volunteers from the TAS and the various regional archeological societies throughout the state. Without fail, the majority of volunteer support for that fieldwork, which continued from July 2015 through December 2016, came from HAS members.
One achievement over that period that I am especially proud to have witnessed is the extraordinary advancement in field skills that so many of the project’s regular volunteers have made over the past three years. When visiting our excavations in November of this year, Dr. Bruce Dickson (professor emeritus of Anthropology at Texas A&M University, and my graduate studies mentor) mentioned how surprised and impressed he was that such a complex site could be excavated so meticulously with volunteers. His comment was entirely complementary, although it surely reflected some of the biases found in academia with respect to excavations carried out by individuals lacking formal classroom training. And those biases aren’t entirely unfounded in my experience, but neither are they universal. It really only struck me upon hearing his words to reflect upon that fact that I had long since stopped being surprised by routinely receiving high-quality work from my volunteers. And it occurs to me now, as I’m writing this, that I have for perhaps been so long accustomed to excellence from HAS volunteers that I too infrequently mention my appreciation for their efforts. Please know that your continuous dedication to knowledge, self-improvement, and doing things the right way is always sincerely appreciated and never taken for granted.

**WHAT WE ACCOMPLISHED**

Cotton Field is a relatively large site; larger than the area that we have stripped for excavation, although that seems to be the focal area of prehistoric activity. Our investigations span an area 40-meters (E-W) by 8-meters (N-S), with excavations reaching a maximum depth of over four meters. An exploratory 1x1 meter unit that was hand-excavated to that extraordinary depth encountered artifacts at the bottom, so we can be certain that Cotton Field has many more (and older!) secrets to share. It seems likely however that I will not be the person leading those excavations for our efforts to this point will keep my plate full for quite a long time.

To date we have discovered several unique, well-preserved occupation zones (at least eight) spanning the length of the Late Prehistoric interval (ca. AD 650-1450). Across those zones, more than 30 cultural features have been identified, representing bag boil dumps, open camp fires, animal butchering localities, hide processing areas, a probable rock cairn, and other remnants of prehistoric lifeways. We have also recovered thousands of artifacts including stone tools and debitage, ceramics, faunal bone, shell, and burned rock. The exact number of total artifacts recovered will not be known until we have finished inventorying the collection, which promises to be the focus of many lab nights throughout the coming year.

**WHERE WE ARE AND WHAT COMES NEXT**

There will be at least one more visit to the site in January when Charles Frederick once again comes out to inspect the finer elements of the site’s stratigraphy. I also have several more profile maps to complete, but no further excavations are planned. Ed and Rita are hoping that one of the academic institutions in the state will have an interest in resuming excavations where we left off, but there has been no progress in that direction at this point. As many readers are likely aware, few of the state’s academic institutions currently have active research programs in Texas. If professional interest in continuing excavations at the site does not materialize within the first few months of the New Year, I will recommend that ground cloths and tarps be laid out over all excavated surfaces, and that the site be backfilled in order to preserve it for future research.

The end of fieldwork isn’t the end of an archeological project. In fact, for large projects like Cotton Field, it isn’t even the half way point. Many months of sorting, inventorying, and cataloging lay ahead before the important analysis phase can begin. To get through such a large collection in the shortest possible time, I will need the assistance of a large group of dedicated volunteers. So fear not everyone - your ability to keep making important contributions to this amazing project hasn’t nearly ended!

I hope everyone reading this has had the opportunity to enjoy rest, peace, family, and friendship over this holiday season as 2016 comes to a close. The new year promises many more occasions that will bring us together in pursuit of our shared passion for Texas heritage research, whether the focus of those endeavors be Cotton Field, Frost Town, or something that I’m not even at the center of (like dark matter and black holes, I’m open to the possibility that such things exist).

Happy New Year, Y’all!
HAS Artifact Recovery Project at the Steiner Tract in Frost Town

By

Louis F. Aulbach

Since the beginning of July, 2016, members of the Houston Archeological Society have been assisting TxDOT and Prewitt and Associates, Inc. in the artifact recovery process at the Frost Town site in Houston's Second Ward. Over 1,000 hours of volunteer work has been provided by HAS members, and a remarkable array of artifacts have been extracted from the dirt piles that were set aside for enhanced screening.

Although the archeological project area covers a large portion of the original fifteen acre Frost Town site consisting of eight city blocks, the HAS has been working on a specific tract of land in Frost Town Block D, a city block on the south end of the subdivision. This tract, which we are calling the Steiner Tract, was the homestead of the Steiner family, and the property was continuously occupied by the Steiner family from the mid-nineteen century until the second decade of the twentieth century. In 1926, the Missouri, Kansas and Texas Freight Terminal was built on the site, and the railroad tracks of the terminal replaced thirteen houses that had been on Block D and the Steiner property.

Extensive excavations of the surface of Block D revealed the twentieth century railroad episode of the site. Below that, however, lay the relatively intact Frost Town layer that was of significant historical interest because of its potential for understanding the aspects of daily life in the earliest years of Houston's existence.

Franz Steiner and his wife Johanna immigrated to Houston from Prussia about 1852, and on January 5, 1853, Steiner purchased Lots 1, 2, 3, 4, 6, 12 and parts of Lots 9 and 11 in Block D of the Frost Town Subdivision. Although Steiner was a shoemaker by trade, the large amount of land that he owned in Block D allowed him to establish a dairy on the property after the Civil War. Later in the nineteenth century, he added rent houses to the lots on his land. Potentially, the residue of seventy years of residential and commercial activity remained on this tract of land.

In order to probe the structural features of the Frost Town layer in detail, a significant portion of the overlying dirt was removed and placed in six designated piles along the perimeter of the site. These piles of dirt, labeled A through F, that were assigned to the HAS for screening and artifact recovery.

Piles A and B have been completely screened at this time. Piles C and D are almost done and piles E and F remain to be screened. The results of the HAS work has been remarkable, with glass, metal and ceramic artifacts that date to the late nineteenth century as well as antebellum Houston. The actual number of artifacts recovered has been especially rewarding, too.
The maps provided below show the location of Block D and the Steiner lots within Frost Town Block D.

Left: The Wood Map of Houston, 1869, shows the Frost Town Subdivision, and Block D is highlighted with a green border.

Right: Frost Town Block D is highlighted with a green border, and the lots in Block D that were owned by the Steiner family are highlighted in yellow. The Elysian Viaduct is represented by the curving dashed lines, and the viaduct pillars are shown as yellow circles.

For more information on the Steiner family, see:

Aulbach, Louis F.
TWO NEW ARTIFACTS FROM THE TIMBER FAWN CLOVIS SITE (41HR1165)

Wilson W. Crook, III

As HAS members are aware, the Timber Fawn Clovis site (41HR1165) is the location in northeastern Harris County (Kingwood) where we discovered and salvaged 24 artifacts belonging to the Clovis culture (ca. 13,500-12,900 BP). The discovery was published in a special report and distributed to the membership last year (Crook et al. 2016). With the completion of our salvage collection effort, the land owner, K. B. Homes, completed the housing development of the Rivergrove sub-division where the site is located. Over the past year, I have given a number of presentations on the site in an effort to raise public awareness on the potential for future discoveries in the Houston area. Recently, these efforts have paid their first dividends with the discovery of two new artifacts at the Timber Fawn site.

A local resident, whose home is located over the area where a number of the Timber Fawn artifacts were recovered, found two new artifacts during the construction of a lawn sprinkler system. Both artifacts have been loaned to the writer for study and inclusion into the Timber Fawn artifact database.

The first artifact is the tip of a broken projectile point. As can be seen in Figures 1 and 2, the remains of a central flute can be seen below the tip on both the obverse and reverse faces. Moreover, the tip of the point is relatively thick for a Clovis point and shows prominent beveling (see the left lateral edge in Figure 2). Both features are indicative of the point having been severely damaged and hurriedly re-sharpened. This would also account for the proximity of the flute to the tip of the point. The point is made from a light gray-colored chert which fluoresces a strong yellow-orange color under UV radiation.

Figure 1: Obverse face of broken and re-sharpened Clovis point.

Figure 2: Reverse face of broken and re-sharpened Clovis point. Note the presence of prominent beveling on the left lateral edge.
The second artifact is a narrow bladelet which has fine retouch on both lateral edges (Figure 3). Examination of the bladelet shows that it has a relatively small bulb of percussion, typical of Clovis blade production. However, the bladelet is almost flat with little to no index of curvature. As such, it appears to be the product of basal thinning, possibly even a channel flake. The artifact is made from a mottled chert which also fluoresces yellow-orange under UV light.

Both artifacts are either broken and/or at the end of their useful life and have been discarded. This is consistent with the rest of the Timber Fawn artifact assemblage which represents a seasonal hunting camp rather than a more permanent occupation. Future work on the artifacts will include detailed measurements and subjecting them to X-Ray Fluorescence analysis in order to attempt to source the chert.

Crook, Wilson W., III, Lenore A. Psencik, Linda C. Gorski and Thomas L. Nuckols
Patrick Drake, an apothecary in Binghamton, New York created the formula and also designed the bottle for DRAKE’S PLANTATION BITTERS. Introduced in 1860 and patented in 1862, an early advertisement listed ingredients and cures (as described in an advertisement in *TEXAS: HER EARLY HISTORY, CLIMATE, SOIL, AND MATERIAL RESOURCES 1871*):

“Santa Cruz rum, calisaya bark, dandelion flowers, lavender flowers, anise, wintergreen, chamomile flowers and other ingredients”

“Promotes digestion and cures dyspepsia / Is the best appetizer ever discovered / Imparts vitality to the circulatory system / Is taken by the most delicate ladies as well as gentlemen.”

In 1862 Drake partnered with Demas Barnes to form Drakes and Co. located in New York, New York. Barnes had owned many different patent medicine companies including MEXICAN MUSTANG LINIMENT before joining Drake. In 1867 Drake would form a sole proprietorship called the P.H. Drake Company. Drake died in 1883. William Ward took ownership and continued production until the 1900’s.

The bottle is an easily recognized log cabin shape, which is known to come in many different mold variations and numerous colors with the most common being shades of amber. Mold variations include patent date locations as well as log counts above the label plate, with the 4 log count thought to be the earliest followed by the 5 and 6 log.

The pictured shards shown below are from the town site of San Jacinto, bottles are “attic find” or non-dug examples with the light amber bottle being a 4 log example and the dark bottle being a 6 log. The bottle is marked on the 3 roof panels opposite each other: top roof panel S T / DRAKES mid roof panel 1862 / PLANTATION lower roof panel X / BITTERS.
DON'T FORGET MEMBERSHIP RENEWAL IS DUE

It’s that time of the year again!! If you have not done so already, it is time to renew your HAS Membership for 2017. For just $25 for an Individual, $15 for a Student, or $30 for a Family you can continue to be part of the most active Archeological Society in Texas. You can find a membership form on our website at

http://www.txhas.org/PDF/HAS%20Membership%20Form.pdf

*** IMPORTANT NOTICE ***

The University of St. Thomas will be closed 16 – 17 March, 2017. Therefore the March HAS Membership Meeting has been rescheduled to

7:00pm on Thursday 9th March, 2017.

The topic of the meeting is “Reminiscences of Moses Austin Bryan” and will be presented by Beth Aucoin.
Houston Archeological Society
Monthly Meeting Programs for 2017
7:00pm Third Thursday of every month (except June)
M. D. Anderson Hall, St. Thomas University

Programs for 2017


March 9, 2017 - Beth Aucoin, “Reminiscences of Moses Austin Bryan”.

April 20, 2017 - TBD

May 18, 2017 – Kimberly L. Faulk, MA, “Underwater Archeology on the Gulf Coast”.

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 visited 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/

Note: Please submit articles for publication to The Profile Editor Bob Sewell at newsletter@txhas.org. Submit articles no later than January 26th for the February 2017 issue.