



Benchmark

Volume 34, Issue 8

September 2020

President's Message

SEPTEMBER NTAS MEETING WILL BE VIRTUAL



James Everett, President

The September 10 NTAS meeting will be our second monthly meeting conducted using Zoom. Our August Zoom experience was extremely successful. NTAS members and all individuals on our guest email list, including members of the former Collin County Archeological Society, received a Zoom "invite" for the meeting. Forty-one devices joined the meeting, representing about 50 individuals. Attendees included NTAS members in Mississippi, Beaumont, and Austin, as well as several local members who have been unable to attend in-person meetings. I encourage all NTAS members to Zoom with us on September 10.

in three different Regions of North Texas.

The Texas Archeological Society has done extremely well this year in its efforts to overcome the \$18,000 budget deficit created by the current pandemic. Of course, one of the TAS activities that we would normally be planning for at this time but which had to be canceled due to coronavirus is our Annual Meeting. Just as we did with our canceled field school in June, we are asking TAS members to consider making a donation to the TAS General Fund in lieu of part or all of the money they would normally have spent to register for Annual Meeting. These donations will help in the effort to offset this year's budget deficit.

The Texas Historical Commission's Steward meeting on August 1 was also held using Zoom. During that meeting, three NTAS members were recognized for their outstanding work as Stewards during the past year: Art Tawater (Region 2), Bryan Jameson (Region 3), and Chris Meis (Region 7). Since NTAS represents the North Texas area, it is noteworthy that these three Stewards reside

The **NORTH TEXAS ARCHEOLOGICAL SOCIETY (NTAS)** meeting for **September 10th** will be **held via Zoom** (see **Page 3** for instructions).

NTAS meetings are **free** and visitors are always welcome.

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North Texas Archeological Society

September Speaker: Elizabeth Nelson

Tuberculosis in the Wake of the Wari Empire

Archaeologists have worked to increase our understanding of the decline of the first expansive state of the Andes, the Wari Empire of Peru, which thrived throughout the Middle Horizon (~600 – 1000 CE) yet suddenly declined at the beginning of the Late Intermediate Period (~1000-1400 CE, LIP). Although much about their demise remains unknown, archaeological evidence reveals Wari populations experienced a severe drought and subsequent shift in diet, an increase in violence, and the ceasing of monumental constructions and movement towards more dispersed settlements, coincident with the apparent rise of TB. My dissertation research contributes a paleopathological component to the broader picture of the decline of the Wari investigating skeletal and molecular evidence of tuberculosis from the former capital, Huari, during imperial collapse and following. This presentation discusses skeletal and molecular results within the biocultural context and considers both the experience of these post-Wari communities and the evolution and ecology of TB in the ancient Andes.

Elizabeth A. Nelson of the Department of Archaeogenetics, Max Planck Institute for the Science of Human History (MPI-SHH), is jointly completing her Ph.D. at the University of Tübingen Institute for Archaeological Sciences and the MPI-SHH. She received her M.S. from the University of North Texas Health Sciences Center through the defense of her thesis which investigated skeletal fluorosis in a Middle Woodland population of the Lower Illinois River Valley. She completed her B.A. at University of Texas at Arlington where she is currently teaching as an Adjunct Professor in the Anthropology Department. Her research incorporates skeletal and molecular analyses to investigate population health and disease. Her work is regionally focused in the Americas with special attention to disease transmission and pathogen evolution in contexts of climatic turbulence and socio-political conflict.



Preparing to Zoom

If you do not already have Zoom, it will save time if – before you actually want to use it - you download the Zoom software or app by going to Zoom.us and, at the bottom of the Home Page, clicking on “Download”. This will allow you to download and install the software free, without actually having to set up a Zoom account (with email address and password). If you prefer to have a free Zoom account, click on the “Sign up, It’s free” button, provide your email address and a password, and you will have a free Zoom account (which allows you to host your own Zoom meetings if you want to).

Prior to each monthly meeting, you will receive a “Zoom invite” with the necessary link and other information regarding the meeting. **Keep the “invite”** to make it easier to join the meeting. (You will need the “invite” the night of the meeting.)

Each Zoom “invite” will also include such things as tips about what to expect as you join the meeting, “Zoom etiquette”, and other pertinent information.

The Zoom “invites” will list the names and phone numbers of several NTAS members who have agreed to be Zoom assistants, available to help anyone who encounters a problem joining the meeting or using any of the Zoom features (e.g., raising your hand to ask a question, using the “chat” feature).

At least for the first few meetings, please limit access for each household to one device per meeting. (After the first few meetings, hopefully we will have a better idea of how close we are to exceeding our 100-device limit.)

Using Zoom for our monthly meetings will be a learning experience for all of us. Please be patient and understanding.

Welcome New NTAS Members:

Doug Boyd & Family

Missi Green

Donna Otto

Update Your Calendar - NTAS Monthly Meeting Speakers

October 8th (virtual): Marion Coe
November 12th (virtual): Dr. Thomas Guderjan

An Introduction to Dichroic Glass

Eddie Osburn

Dichroic (di-crow-ick) glass is a multi layered, multi colored glass with reflective properties. It is made by stacking micro layers of quartz crystal and metal oxides that have been vaporized in a vacuum chamber and then applied to the surface of multiple layers of glass. The glass can be clear or colored, usually with a black layer of glass on the bottom.

Shifting color structures can be achieved by using different colors of glass or different metal oxides. Metal oxides that are commonly used are gold, silver, titanium, chromium, aluminum, zirconium, magnesium, and silicon. Each metal oxide produces a different color when crystallized at very high temperatures in a kiln. The

finished glass has the property of showing different colors depending on whether the light is reflected or refracted. In one light it's gold, turn it slightly and it's green, or purple, or pink.

NASA used dichroic glass in the 1950s and 1960s for use in the gold colored visors of astronauts helmets to protect their eyes from harmful radiation of unfiltered sunlight in space.

As you can see, producing dichroic glass is complicated and labor intensive, therefore it is expensive to buy and can be nerve wracking to work with.

Here are some samples of points that were knapped using this strange material.



NTAS - Preserving the Past for the Future

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Two easy and quick ways to pay your 2020 NTAS dues!

By PayPal: Complete the Application Form and pay online with PayPal at the NTAS website, ntxas.org/membership (**PLEASE NOTE:** The browser Chrome does not interface with PayPal through our website. Please use a different browser.)

By mail: Complete the application below and mail it with your check to:
North Texas Arch Society, PO Box 24679, Fort Worth, TX 76124

September 2020 NORTH TEXAS ARCHEOLOGICAL SOCIETY (NTAS) MEMBERSHIP APPLICATION FORM

Name(s) _____

Address _____ Preferred Phone _____

City/State/Zip _____ Email Address _____

Emergency Contact(s): Please provide the following information regarding the individual(s) from whom we can request or to whom we may provide information in the event of an emergency. Please consider listing at least one contact who does not live at your residence.

Primary Contact Name _____ Alternate Contact Name _____

Relationship _____ Relationship _____

Phone Number _____ Phone Number _____

I want my newsletter delivered by _____ email (\$0) or _____ by USPS mail. (\$10) **Thank you** for choosing delivery by email.

Membership Type & Fees (Membership Term: January to December)

- _____ New Individual \$20 _____ USPS Mail Delivery \$10
- _____ Renewal _____ Family \$25 _____ Optional Memorial Fund Contribution
- _____ Student \$10 (*enrolled in grade school through college/university whose coursework is considered to be half time or more*)
- _____ Contributing \$30

****Please make checks payable to NTAS****

Code of Ethics (signature required): I PLEDGE THAT I WILL NOT INTENTIONALLY VIOLATE THE TERMS AND CONDITIONS OF ANY FEDERAL, STATE, OR LOCAL ANTIQUITIES STATUTES CONCERNING CULTURAL RESOURCES OR ENGAGE IN THE PRACTICES OF BUYING OR SELLING ARTIFACTS FOR COMMERCIAL PURPOSES OR ENGAGE IN THE WILLFUL DESTRUCTION OR DISTORTION OF ARCHEOLOGICAL DATA OR DISREGARD PROPER ARCHEOLOGICAL FIELD TECHNIQUES. I UNDERSTAND THAT FAILURE TO FOLLOW THESE GUIDELINES WILL PROVIDE GROUNDS FOR EXPULSION FROM THE SOCIETY.

Signature _____

Date _____