MAY-2024

PRESERVATION ◆ EDUCATION ◆ RESEARCH ◆ INSPIRE

Dear Member:

COOKIES, COFFEE & CONVERSATION! and a lecture. What's not to like? Please join us at 5:30 for some stimulating conversation with fellow members and have a cup of coffee and some cookies.

See page three for the winners of the 2024 The Cornelia Futor Memorial Student Grant. **A BIG THANK YOU** to all of our donors. Their generosity allows us to award $2,000 each to three Florida university students. This grant will help pay for their attendance to Field Schools this summer. We are helping the future archaeologists.

Darwin "Smitty" Smith, President
hmsbeagle22@gmail.com

Twin Seated Figures, Malta (Pinterest)

May 15 - at 5:45 PM at the Selby Library in downtown Sarasota

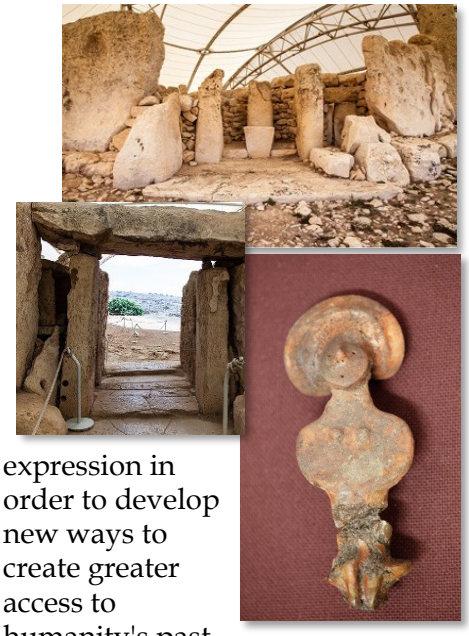
"How Pots will Travel: Neolithic & Bronze Age Malta"

Dr. Frederick S. Pirone
Visiting Assistant Professor of Anthropology, New College of Florida

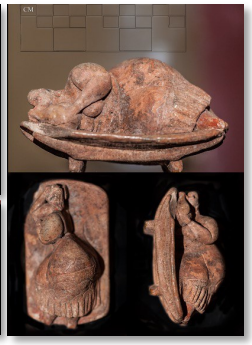
Ceramics are traditionally mundane objects; however, they can shed considerable light on human movement and interaction. This presentation will specifically explore the role Maltese ceramics played in prehistoric trade and interaction networks and more generally what studying the chemical composition of Maltese ceramics and geological clay sources has revealed regarding cultural change from the late Neolithic to the Bronze Age.

Dr. Pirone was born and raised in Tampa, FL. He attended Jesuit High School. Prior to becoming an archaeologist, Fred was a lawyer practicing for 20 years in civil litigation. In 2017, Fred received a Ph.D. in Applied Anthropology with a concentration in Archaeology from the University of South Florida. Pirone's archaeological research predominantly is in the Mediterranean and focuses on the archaeological sciences and digital/virtualization methods; human movement, interaction, and culture change; the archaeology and anthropology of religion, belief and ritual practice; ancient fragrances; archaeoastronomy; and cultural heritage, preservation and public education.

Additionally, Fred is currently working on research that explores the intersection of archaeological knowledge and creative expression in order to develop new ways to create greater access to humanity's past.



Photos: Dr. Pirone

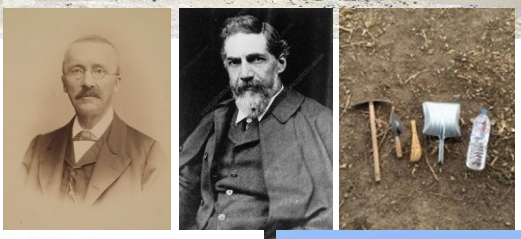


Notes from a Time Sifter

LiDAR (Light Detection and Ranging), GPR (Ground Penetrating Radar) and PPM (Proton Magnetometer)

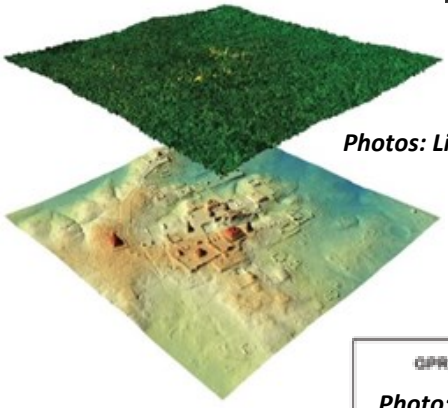
By Evelyn Mangie, Time Sifters Board Member.

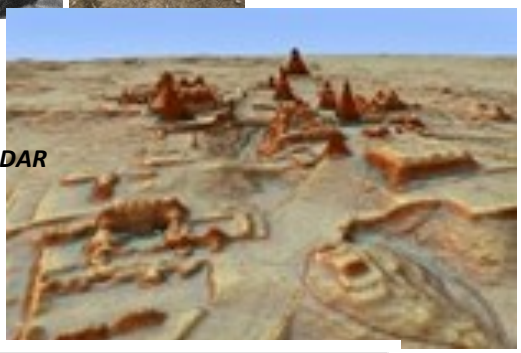
There have always been people interested in past civilizations. Khaemweset (son of Rameses II 1292-1191 BCE) restored ***Djoser's step pyramid***, and Babylonian King Nabonidus (550 BCE) led excavations to study the remains of earlier temples. Renaissance scholars recorded and drew maps locating artifacts, but one had to be wealthy (or financed by a wealthy donor) to spend a life searching for sites, leading excavations, and studying remains like ***Heinrich Schliemann and William Flinders Petrie*** **did.**



Photos: Djoser's step pyramid, Schliemann, Flinders Petrie.

Today, archaeology is no longer an art or a rich man's hobby; it is a science and a profession. Colleges and Universities offer degrees in archaeology. Graduates are trained to manage artifact collections, to work in public programming, to teach, and most exciting, to do field work using ***the traditional excavation tools, shovels, trowels, brushes, and dental picks.***





Photos: LiDAR

However, today's archaeologists now have high tech tools that allow them to "see" what is under the surface without digging. New methods and technology help archaeologists not only find new sites, but also discover things inside buildings like tombs.

Light Detection and Ranging, (LiDAR) has been able to find unknown cities and civilizations in Central and South America that are now covered with dense jungle. LiDAR can be mounted on a drone or small aircraft from where it can detect buildings and foundations under the overgrowth.

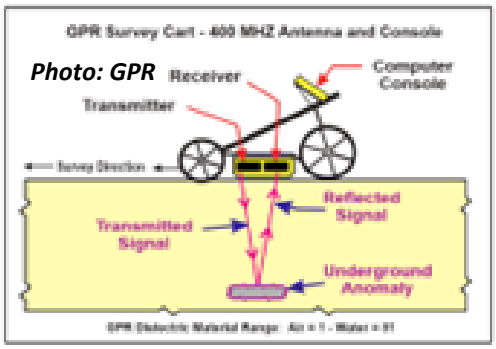


Photo: GPR

In addition, ***Ground Penetrating Radar (GPR)*** allows archaeologists to find features that are up to 100 feet underground, no digging required. GPR can survey very large areas for small features like graves and tombs.

Proton Magnetometer, (PPM) is another new archaeological tool. It measures small variations in the Earth's magnetic field that allows archaeologists to map objects underground without disturbing the surface or harming fragile artifacts. PPM was useful in identifying parts of the ***necropolis around the tomb of Qin Shi Huang Di where the terra cotta army was discovered.*** PPM can also be used at sea to locate wrecked ships.

Computers play a huge role in recording findings. Virtually all field archaeologists are now equipped with iPads. IBM's Watson software does amazing things like analyzing speech. It puts the results into categories that could help linguists decipher languages like the ***Minoan Linear A writing system*** that has yet to be deciphered. These computer analysis programs can synthesize geographical and archaeological data that could help in understanding other mysteries like the Nazca lines in Peru.

All of this still requires funds but now there are many donors. Universities, governments, and private institutions award grants to worthy projects. *The National Geographic Society* gives grants for new tools and equipment for specific projects. These new tools offer 21st century archaeologists an exciting future

Continued on page 4 ...

Photos: *Wikipedia.*

Time Sifters Presents

Cornelia Futor Memorial Student Research Grant

The Cornelia Futor Memorial Student Grant is made possible thanks to the support of CRM industry leaders *ACI, Janus Research, SEARCH, and STANTEC* as well as many individual donors. The grant of up to $2000 is for eligible students to attend field school. This grant is open to students currently enrolled at a Florida university or college who have begun their junior year of undergraduate studies at the time of application, MA students, and Ph.D. students who are pursuing a major in anthropology with a focus on archaeology.

Announcing the winners of ***the 2024 Cornelia Futor Memorial Student Research Grant.*** The students will be attending field schools this summer. We look forward to seeing pictures from the field and hearing about their experiences and what they have learned. This award helps the next generation of archaeologists get the training they need for future success.

The 2024 Winners

Sofia Arias
BA Student
USF

Sofia Arias is a senior at USF studying anthropology with a focus on archaeology. She has previously volunteered with Dr. Nancy White to perform surface-collecting and shovel-testing at the USF campus in the path of a proposed new football stadium and plans to volunteer with Dr. White again this summer helping to test at the Pierce Mounds complex in Florida. Sofia states her goal is to become a professional archaeologist in either the CRM industry or a museum context.

Time Sifters' grant will assist Sofia to attend the University of Wyoming's field school titled *"Clovis to Coupokes,"* which includes surveying and testing at Willow Springs, a High Plains trading site, fieldwork at La Prele Mammoth site and the mapping and excavation of Wyoming's first coal mining town. At the Le Prele Mammoth site she is looking forward to seeing evidence of early human activity, learning how to identify artifacts, and gaining greater insight into the lives of early Native Americans.

Alyssa Marie Duarte
BA Student
FSU

Alyssa Duarte is currently studying anthropology with a focus on archaeology at FSU and has already gained experience in archaeological research within a lab setting. To date, she has concentrated on historic archaeology and the African diaspora, working on the Evergreen Plantation Archaeological Survey under Dr. Jayur Mehta, a project focused on the cabins of the formally enslaved of a southern sugar plantation. Alyssa has also assisted on Haciendas of Nasca Project, masking images of artifacts to create public 3D models, which concentrates on the lives of formerly enslaved Africans in Peru.

Time Sifters' grant will assist Alyssa to attend the El Campanario Project, offered by the University of Arizona. The project aims to understand the socio-political organization of El Campanario site in Peru during the 1000-1400 CE Period. The field school offers training in both archaeology and ceramic, textile, and lithic analysis, and also in bioarchaeology and osteology.

Sarah Hassam
MA Student
USF

Sarah Hassam is a first-year Master's student at USF. Her primary research interest is Late Roman Sicily and Malta with a focus on manifestations of religious syncretism in funerary contexts, which will likely be her future thesis project. Since Spring 2023, Sarah has been Lab Manager of the USF Institute for Digital Exploration and has already gained expertise in osteo-archaeology and 3D digitization. Working under Dr. David Tanasi at this summer's field school, she will be responsible for the 3D digitization of the archaeological units and of all the related findings and skeletal remains.

Time Sifters' grant will assist Sarah to attend the archaeological field school at Villa del Casale in Piazza Armerina, Sicily. This archaeological summer school is hosted by ArchLabs and Università di Bologna. A famous late antique Roman villa, Villa del Casale houses the largest mosaic collection in Southern Italy.

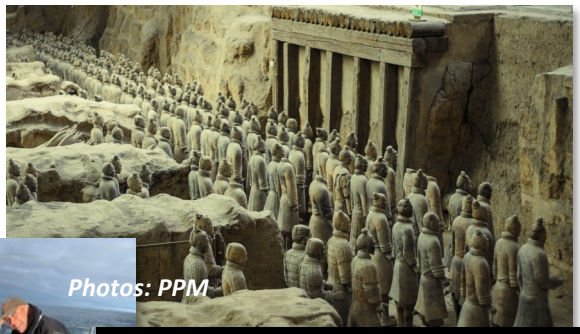
Continued from page 2 ...

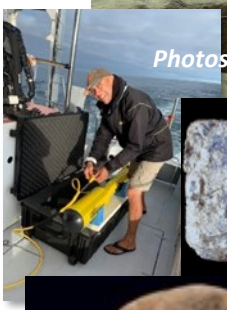
LiDAR, GPR, & PPM ...

and encourage donors to invest in our history that has fascinated us for centuries.

Global Warming is an unwelcome tool, but it will help uncover buried artifacts. The ice sheets and glaciers are melting, exposing things that have been frozen for thousands of years. A 40,000 -year-old Ice Age mammoth was found in a receding glacier in Siberia in 2007. New Viking sites are being revealed along the Canadian coasts where temperatures have risen. No doubt more will be exposed there that could change the history of the "discovery" of America.

Modern archaeologists have new tools to uncover our hidden past. But sites are not always easy to find, and some, when discovered, are often difficult to understand. Archaeologists choose sites from historical sources, oral history, and plain guessing based on probability. Once a site is chosen, archaeologists do a systematic walk over an area to collect and record information from the surface. Then they dig.





Photos: PPM

Photo: Global Waming

In the News

Oldest Human-made Structure in the Americas

By Smitty, Time Sifters Board Member. Sources: Sources: Archaeology Magazine, EurekAlert, Live Science.

New research reveals more information about the Louisiana State University (LSU) Campus Mounds, that indicates **that Mound B** is the oldest surviving human-made structure in the Americas, at 11, 000 years old. The study also indicates that Mound A, which began 1,000 years later was constructed with mud taken from a nearby estuary.

The two large, grassy mounds that are about 20 feet tall, on LSU's campus, are among the more than 800 man-made, hill-like mounds in Louisiana, built by ancient indigenous people. While many mounds in the region have been destroyed, the LSU Campus Mounds have been preserved and are listed on *the National Register for Historic Places.*

The study is based on the layers of sediment cores taken from the two earthen mounds. The cores revealed layers of ash from burned reed and cane plants, as well as the burned osteons. Radiocarbon dating of the layers of material indicates the mounds were built over a period of thousands of years.

The crests of both mounds are aligned along an azimuth that is about 8.5 degrees east of true north and according to LSU astronomer Geoffrey Clayton, about 6,000 years ago, the red giant star Arcturus would rise in the night sky and is aligned along the crests of both mounds. Arcturus is one of the brightest stars that can be seen from Earth.

Photos: Louisiana State University

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