



Volume 64 ♦ Number 11 ♦ November 2018 ♦ A monthly newsletter for and by the members of MAGS

November Program

W. C. McDaniel

MAGS



The program for the November Membership Meeting will consist of two parts:

- 1. MAGS School of Rock with table displays and information on:
 - Rock tumbling with David McAlister
 - Crystal cleaning with W. C. McDaniel

- Rock drilling with Leo Koulogianes
- Jewelry making with Mildred Schiff
- Wire wrapping with Kay Maclaughlin
- Coppersmithing with Theresa Childress
- Metal detecting with Lou White

Continued, P. 3

In this issue

November Program	P. 1
November Election	P. 1
MAGS And Federation Notes	P. 2
MAGS Notes	P. 3
Greetings, All MAGS Members	P. 4
Jewelry Bench Tips	P. 4
Fabulous Tennessee Fossils	P. 5
October Rock Swap	P. 6
September Board Minutes	P. 7
September Meeting Minutes	P. 7
Federation News Briefs	P. 7
October Meeting	P. 8
Bronze Age Spears Meet Modern Technology	P. 8
Even Older Spear	P. 9
MAGS At A Glance	P. 10

NOVEMBER ELECTION

Don't forget to vote. There are two important elections in November. Aside from the one which is generating all those ads on television, MAGS will hold an election at the November 9 Membership Meeting.

Every two years MAGS elects a new Board of Directors. And this is election year.



The Nominating Committee met and put together a slate of nominations for the 2019-2020 MAGS Board of Directors. Their picks are shown at the top of P. 3, right-hand side. Nominations will also be accepted from the floor at the November meeting.

Your vote matters. Please be there.

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ♦ A monthly newsletter for and by the members of MAGS

2017-2018 MAGS BOARD

President—Charles Hill

1070 Park Swain Road, Grand Junction, TN 38039
♦ (901) 626-4232 ♦ hunter3006@aol.com

1st VP (Field Trips)—James Butchko

4220 Dunn, Memphis, TN 38111 ♦ (901) 743-0058 ♦
butch513j@yahoo.com

2nd VP (Adult Programs)—W. C. McDaniel

2038 Central Avenue, Memphis, TN 38104 ♦ (901)
274-7706 ♦ w.c.mcd@att.net

Secretary—Mike Baldwin

367 North Main Street, Collierville, TN 38017 ♦
(901) 853-3603 ♦ mbaldwin05@gmail.com

Treasurer—Bonnie Cooper

8695 Baylor Road, Arlington, TN 38002 ♦ (901) 444-
0967 ♦ rocks4us@hotmail.com

Director (Asst. Field Trips)—Kim Hill

4755 Royal Elm Cove, Memphis, TN 38128 ♦ (901)
388-7572 ♦ earthsis@aol.com

Director (Asst. Adult Programs)—Dave Clarke ♦

456 North White Station Road, Memphis TN 38117
♦ (901) 308-0334 ♦ dclarke@fieldmuseum.org

Director (Youth Programs)—Open

Director (Asst. Youth Programs)—Open

Director (Librarian)—Nannett McDougal-Dykes

106 Maple Street, Stanton, TN 38069 ♦ (901)
634-9388 ♦ redchesty@yahoo.com

Director (Asst. Librarian)—Jane Brandon

4384 Castle Avenue, Memphis, TN 38122 ♦ (901)
374-0366 ♦ jjbrandon@yahoo.com

Director (Membership Services)—Bob Cooper

8695 Baylor Road, Arlington, TN 38002 ♦ (901)
444-0967 ♦ rocks4us@hotmail.com

Director (Historian)—Carol Lybanon

2019 Littlemore Drive. Memphis, TN 38016 ♦ (901)
757-2144 ♦ sgcarol@earthlink.net

Newsletter Editor—Matthew Lybanon

2019 Littlemore Drive. Memphis, TN 38016 ♦ (901)
757-2144 ♦ lybanon@earthlink.net

Webmaster—Mike Baldwin

367 North Main Street, Collierville, TN 38017 ♦
(901) 853-3603 ♦ mbaldwin05@gmail.com

Show Chairman—James Butchko

4220 Dunn, Memphis, TN 38111 ♦ (901) 743-0058 ♦
butch513j@yahoo.com

Past President—W. C. McDaniel

2038 Central Avenue, Memphis, TN 38104 ♦ (901)
274-7706 ♦ w.c.mcd@att.net

MAGS AND FEDERATION NOTES

Memphis Archaeological and Geological Society, Memphis, Tennessee

The objectives of this society shall be as set out in the Charter of Incorporation issued by the State of Tennessee on September 29, 1958, as follows: for the purpose of promoting an active interest in the geological finds and data by scientific methods; to offer possible assistance to any archaeologist or geologist in the general area covered by the work and purposes of this society; to discourage commercialization of archaeology and work to its elimination and to assist in the younger members of the society; to publicize and create further public interest in the archaeological and geological field in the general area of the Mid-South and conduct means of displaying, publishing and conducting public forums for scientific and educational purposes.

MAGS General Membership Meetings and MAGS Youth Meetings are held at 7:00 P. M. on the second Friday of every month, year round. The meetings are held in the Fellowship Hall of Shady Grove Presbyterian Church, 5530 Shady Grove Road, Memphis, Tennessee.

MAGS Website: memphisgeology.org

MAGS Show Website: www.theearthwideopen.com

We aren't kidding when we say this is a newsletter for and by the members of MAGS. An article with a byline was written by a MAGS Member, unless explicitly stated otherwise. If there is no byline, the article was written or compiled by the Editor. Please contribute articles or pictures on any subject of interest to rockhounds. If it interests you it probably interests others. The 15th of the month is the deadline for next month's issue. Send material to lybanon@earthlink.net.

No DMC field trip in November. The Henderson County Gem and Mineral Society (Hendersonville, NC) rescheduled the field trip they are hosting to June 2019. MAGS will host the DMC field trip in October 2019.

Links to Federation News

- ➔ AFMS: www.amfed.org/afms_news.htm
- ➔ SFMS: www.amfed.org/sfms/
- ➔ DMC: www.amfed.org/sfms/dmc/dmc.htm

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ◊ A monthly newsletter for and by the members of MAGS

November Program Continued from P. 1

- Indian artifacts with Park Noyes
 - Geode cracking—Mike Baldwin (bring your geodes for free cracking)
 - Fluorescent minerals—Mike Baldwin (bring your specimens to get lighted up)
 - Rock types and cycle—Herb Nicholson
2. Silent and **exuberant** yelling auction:
- By the lot and single pieces
 - Some MAGS memorabilia



♪ Want to Be a Member?

If you are not a MAGS Member and wish to become one for yourself or your family, just go to our website at www.memphisgeology.org and print out an application form. There is a prorated fee schedule for new Members only (first year only). Complete the application and mail it along with the dues payment to the Membership Director shown on the form. If you are unable to print the application, you can pick one up at the sign-in desk at any of our Friday night Membership Meetings held on the second Friday of each month at 7:00 P. M. in the Fellowship Hall of the Shady Grove

2019-2020 MAGS Board Nominations

President	W. C. McDaniel
1st Vice President (Field Trips)	Kim Hill
2nd Vice President (Adult Programs)	David Clarke
Secretary	Mike Coulson
Treasurer	Bonnie Cooper
Director (Asst. Field Trips)	Charles Hill
Director (Asst. Adult Programs)	Matthew Lybanon
Director (Youth Programs)	Mike Baldwin
Director (Asst. Youth Programs)	James Butchko
Director (Librarian)	Nannett McDougal-Dykes
Director (Asst. Librarian)	Kay MacLaughlin
Director (Membership Services)	Bob Cooper
Director (Historian/Rock Swaps)	Jane Coop

Presbyterian Church located at 5530 Shady Grove Road. You can also join MAGS at any Membership Meeting. Our Membership Meeting usually consists of an adult program and a separate youth program. MAGS has its annual Holiday Party in December as well as two rock swaps during the year. Visitors are always welcome at our Membership Meetings but membership is required to attend our field trips.

Upon becoming a MAGS Member, all MAGS benefits are granted. The most important benefit is getting to know and make friends with other members who have similar interest in rocks, minerals, fossils, and archaeology. All new members will receive a New Member Packet, a MAGS ID card, and a monthly newsletter via email. Members are entitled to go on our monthly field trips and get free admission to our annual rock

and mineral show currently held at the end of April in the West Pavilion of the Agricenter International located at 7777 Walnut Grove Road, Memphis, Tennessee.

♪ Field Trips

November 17—We will go to a quarry in Batesville, Arkansas. Meet time is 9:30.

December 22— We will go to Pickwick Lake since the water level should be lower.

♪ Adult Programs

November 9—MAGS School of Rock plus Auction(s)

December 14—Holiday Party

♪ Hospitality

Thanks to all who signed up to work hospitality at the Membership Meetings. You make that part of the meeting work better.

Continued, P. 4

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ◊ A monthly newsletter for and by the members of MAGS

- MAGS Notes* The duties are
Continued from P. 3 simple:
3. Before Meeting: Arrive around 6:30. Help set up and organize tables. All items are located in a rolling cabinet.
 4. Monitor snacks, drinks, ice.
 5. After Meeting: Clean up, put all items back in cabinet.
 6. Two Members per meeting.

Here is the schedule for the next two months:

November 9—**Dee Dee Goossens** and **Arlene Oleartchick**

December 14—Holiday Party—**Team Effort**

🎵 November Birthdays

- 1 W. C. McDaniel
- 3 Oliver Carnahan
- 4 Benjamin Gaillard
Judy Dutschmon
- 13 Matthew Lambert
- 15 Phillip Goossens
- 16 Elan Tribo
Melody Smith
Chris Scott
- 17 Jon Flores
- 18 Cathie Jacobs
- 19 Landon Carnahan
Clyde Chrisman
Nina Riding
- 21 Tabitha Lambert
- 22 Angela Hill
Melba Cole
- 23 Robert Weathers
Shirley Ruth Chrisman
Brittani Lambert
- 24 Cahdlah Forsythe-Barrie
Charles Carter
- 25 Amy Smith
- 27 Dylan George
- 28 Alan Parks

- 29 Nedra Baum
Mike Pause
- 30 Robert Neill
Marlowe Blodgett

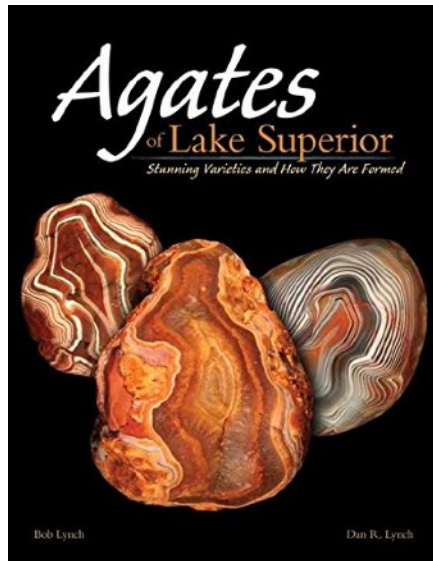
🎵 Show Committee

Next meeting November 27, at the Agricenter board room.

Greetings, All MAGS Members

As you know, the 2019 MAGS annual (January 1-December 31) membership dues should be paid prior to January 1, 2019. You can accomplish this by paying your renewal dues at any of the Friday night Membership Meetings or by mailing your payment to me at: Bob Cooper, 8695 Baylor Rd., Arlington, TN 38002. The dues for next year are:

\$15 (individual) \$25 (family)



This year's early renewal prize is a copy of the book *Agates of Lake Superior* written by Bob and Dan R. Lynch. This is a great book in which you can learn about agate formation and how Lake Superior

agates are unique. It has hundreds of great pictures, diagrams, and tips on how to find and identify agates. When you renew your 2019 MAGS membership, you will be entered into a drawing for this book. You have until the end of the January 11, 2019, Membership Meeting to renew your membership in order to be in this drawing. You do not have to be present to win. Also if you live out of state or do not attend the Membership Meetings and you win the drawing, I will mail the prize to you. Renew early and good luck.

Bob Cooper

MAGS Membership Director

Jewelry Bench Tips by Brad Smith

SMALL PARTS CONTAINERS

I'm always on the lookout for small containers to use for holding all those little parts and tools we deal with in making jewelry, especially since I'm always traveling to classes and workshops.

My latest find are some plastic vials about 15 mm in diameter and 75 mm long. Best part is they are free. The vials are used in the doctor's office to draw blood samples. They cannot be used after their expiration date, and are thrown out. On my last doctor's visit, I asked the nurse if she had any expired vials. She replied "How many do you want?" and tried to give me 400 of them. (We settled on 200).

The ones I have are called "Vacutainers", but there are probably many other names. They are clear plastic with a rubber stopper and a paper label all

Continued, P. 6

Fabulous Tennessee Fossils

*Dr. Michael A. Gibson,
University of Tennessee at Martin*

FTF 46

Silurian Rockwood Formation Fossils

Last essay I mentioned that my History of Earth and Stratigraphy classes met with Dr. Ann Holmes (UT Chattanooga sedimentologist) who arranged for us to visit a wonderful outcropping of Silurian Rockwood Formation south of Trenton, Georgia (which traces northward into Tennessee). The outcrop is loaded with brachiopods, bryozoans, echinoderm fragments, trilobite fragments, and trace fossils, all deposited as death assemblages in a storm-riden shallow marine setting. Even though we were collecting during a torrential rain, we collected a lot of fossils. The Rockwood Formation consists of offshore shallow-marine (below fair-weather wave-base, but dominated by storm deposits and pelagic sedimentation) interbedded shale, siltstone, and thin carbonate beds. It appears that the storms periodically influxed mud from the east onto the seafloor preserving many fossil assemblages by rapid burial. To the east, the Rockwood grades into the Clinch Sandstone, which represents more nearshore and shallower environments collecting sand, silt, and clay eroding off of the Taconic Mountains, which had formed during the previous Ordovician Period. The Taconic Orogeny was the first phase of the building of what will later be the Appalachian Mountains. One of the other important Rockwood lithologies is what are referred to as hematite red beds. In many

places, especially further northeast of Knoxville, the hematite replaced marine carbonate shells and ooids, creating what was thought to be a “self-fluxing” iron ore to fuel the early iron industry in Tennessee. Unfortunately, that did not pan out for these early industrialists, but the Rockwood did remain a good source of iron for local iron furnaces.



Figure 1. UT Martin students in the rain collecting fossils from tilted Rockwood Formation near Trenton, Georgia. (Photo by Ann Holmes, UTC sedimentologist).



Figure 2. Brachiopods from the Silurian Rockwood Formation at Trenton, GA. *Dolerorthis* (A, H), *Spirigerina* sp. a (B, C), *Parmorthis* (D), *Spirigerina* sp. b (E), *Homeospirella* (F), *Glyptorthis* (G), unidenti-



fied bryozoan (I) (photos by Michael Gibson).



Figure 3. Rugose coral *Streptelasma* (photo by Michael Gibson).



Figure 4. Tabulate coral *Paleofavosites* (photo by Michael Gibson).



Figure 5. Trace fossil *Chondrites* in Rockwood siltstone (photo by Michael Gibson).

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ♦ A monthly newsletter for and by the members of MAGS

Jewelry Bench Tips ready to write
Continued from P. 4 on. I find them
really handy for
small parts like jump rings, prong
settings, small drills, nuts and
bolts, faceted stones, and precious
metal filings.



SOURCE FOR PLASTIC

We often use plastic in our

studios, like for a single part die or
for a template, so it's handy to
have a small supply along with the
rest of your sheet, wire, copper
and bronze. But we seldom think
to buy and stock any plastic.

The plastics store I go to has a
scrap bin out back where they give
away their scraps. I usually opt for
the 3/8 and 1/2 inch thicknesses for
use as forming dies, but there's
always a variety of sizes and colors
to choose from including thin
sheets that are good for templates.

If you can't find a shop with
Google or Yellow Pages, do a
search on Ebay.com for scrap plas-
tic by the pound.

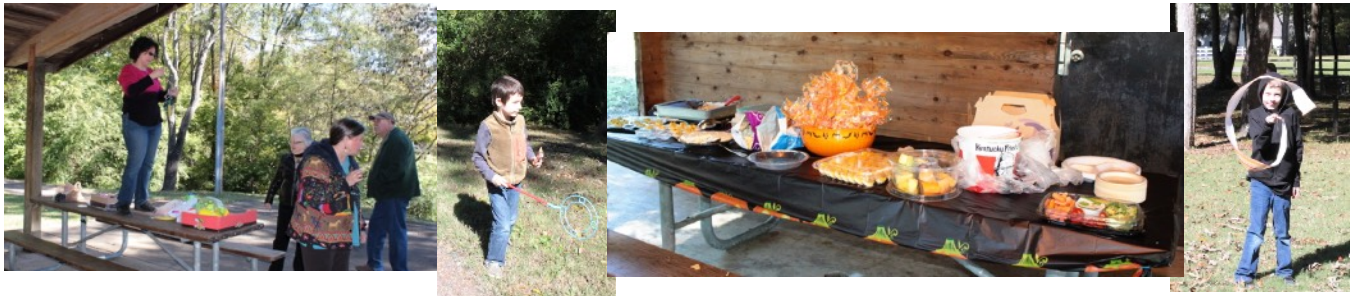


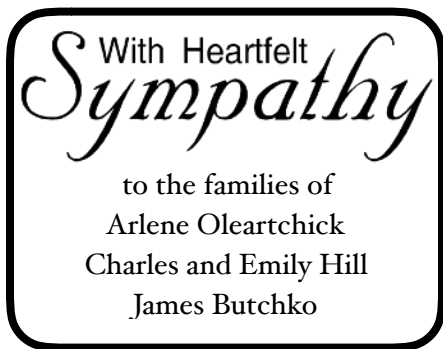
Learn New Jewelry Skills With
Brad's "How To Do It" Books

[http://amazon.com/author/
bradfordsmith](http://amazon.com/author/bradfordsmith)

October Rock Swap by Carol Lybanon

On a beautiful sunny Fall day, MAGS Members came out to the Freeman Smith Park to enjoy great food and lots of fun. While we wished more Members had taken part in this activity, the ones who attended enjoyed the planned activities. I hope everyone enjoyed making their glass wind chimes and flying paper airplanes. Thanks to all who helped make the rock swap a great success, especially Mildred Schiff and Theresa Childress who drilled 180 holes in the glass fragments used to make the wind chimes, and Deborah Schaeffer for bringing coolers and ice.





September Board Minutes

Mike Baldwin

Called to order 6:32. Attending: Charles Hill, Nannett McDougal-Dykes, Mike Baldwin, Carol Lybanon, Matthew Lybanon, Bonnie Cooper, Bob Cooper, Kim Hill, James Butchko, W. C. McDaniel, David Clarke.

Secretary: Digital copies of August minutes were distributed earlier. Hard copies were distributed at meeting. Minutes approved.

Show: Charles nominated James Butchko for 2019 Show Chairman; Nomination approved.. James accepted and reported that a Show Committee meeting at the Agricenter will be forthcoming. Contracts to vendors have been sent. Bonnie reported that she has made some changes on the Show website and is now the administrator.

Field Trips: Discovery Park field trip was very good. Trip for September 22, is confirmed to the Hedger Aggregate Quarry, Batesville, Arkansas. October 13 trip will be a local trip to Nonconah Creek or Richardson’s Landing.

Historian/Rock Swaps: October rock swap is set for October 22, noon-6:00 at Freeman Park in Bartlett. Carol has some ideas for events during the swap. Kay McLaughlin has volunteered to take photos at our events and meetings. Charles will contact her and officially ask her to perform those duties.

Treasurer: Digital financial summaries were distributed earlier in the

week. July checking report was passed around.

Membership: One new member since last Board Meeting.

Programs: September program will be presented by Dr. Riding [Looper Collection]. October: David Clarke [amber]. November: MAGS School of Rock. December: Holiday Party.

Newsletter: September 20 is the deadline for newsletter articles and photos. Please send photos. W. C. is almost finished with his Tucson article.

Web: September updates have been made on the home page, calendar, newsletter, and newsletter index pages. Mike asked Members to submit articles for the home page with photos.

Librarian: Nannett purchased casters for the cabinets. She will begin repairs on the cabinets on Saturday following the September meeting. Six new books, some reference only, will be added to the library.

Old Business:

1. Charles reported on the proposal to develop a staired walkway from the parking area down to 20 Mile Creek at Frankstown. The construction will be engineered by the Mississippi Highway Department and the parking area will be paved. Discussion followed about MAGS participation.

2. Chucalissa proposal: Ron Brister proposed a glass museum case to house Native American pottery, plaques and information. MAGS moved to donate \$1,000 to Chucalissa to implement this project.

New Business: W. C. will be representing MAGS at the Zoo Harvest Festival on September 22. Bob will provide W. C. with copies of MAGS information sheets and membership applications for this event.

Adjourned 7:22.



September Meeting Minutes

Mike Baldwin

Called to order by VP W. C. McDaniel at 7:05. 28 Members attending (7 Juniors). One new Member.

Webmaster and newsletter editor asked for articles. Next Saturday’s field trip will be to the Hedger Aggregate Mine in Batesville, Arkansas, to collect large agates, petrified wood and fossils. Mike Baldwin asked Members to save a few specimens from each field trip to be given to the youth members. The signup sheet is on the back table along with directions and instructions. W. C. reminded Members of field trip etiquette. October field trip will be to somewhere local. October rock swap will be on October 22 to Freeman Park in Bartlett. MAGS will donate \$1000.00 to Chucalissa for the purchase of a glass cabinet for Native American Pottery in memory of Sherri Baldwin. A children’s book and a reference book were donated to the library.

Displays: [01] local creek treasures [02] Savannah, GA Megalodon teeth and Frankstown Sharks Teeth, [03] Agates from Crowley’s Ridge.

Dr. Riding from Delta State presented the program, on Late Pleistocene Vertebrate Fossils from Mississippi Alluvial Plain Gravel Bars.

Adjourned 8:20.



Federation News Briefs



The latest *A. F. M. S. Newsletter* (link on P. 2) features the 2019 Web Site Contest, the AFMS Endowment Fund, and Upcoming AFMS Regional Federation Conventions. In addi-

Continued, P. 8

MEMPHIS ARCHAEOLOGICAL AND GEOLOGICAL SOCIETY

MAGS Rockhound News ◊ A monthly newsletter for and by the members of MAGS

Federation News Briefs tion, Juniors Program Chair Jim Brace's column has a number of suggestions to improve clubs's junior programs. The Federation—national and regional—has resources that can benefit local clubs such as MAGS.

Another resource that's easy to use is the "Special Interest" section on the SFMS website, <http://www.amfed.org/sfms/>.

October Meeting

Photo Credit: Marc Mueller



Bronze Age Spears Meet Modern Technology

Matthew Lybanon, Editor

In a paper published in the *Journal of Archaeological Science: Reports*, scientists report the results of examinations using X-ray fluorescence (XRF), X-ray and neutron imaging, and prompt gamma activation analysis (PGAA) on a spearhead that the Hungarian National Museum in Budapest acquired in 1893. The artifact, donated by László Pokorný, a collector, boasted a 14 cm-long leaf-shaped blade—worn and damaged—ending in a cylindrical socket that had clearly once contained a wooden shaft.

The museum curators saw immediately that the spearhead was similar to many previously unearthed through the Carpathian region of central eastern Europe, dating from the Late Bronze Age—between 1200 and 500 CE. The

Kikinda spear (named for Kikinda in what is now Siberia, where it was discovered), they noted, might have ended up submerged in the marshes as long as 3,000 years ago by accident, or as the result of a ritual, or perhaps just because the shaft broke off “during the unsuccessful removal of the weapon from the target” and was then judged to be not worth repairing and tossed aside.

Another problem with the spearhead's history results from the fact that Kikinda is a city, built on reclaimed marshes, but the name equally applies to the marshy region around it. Museum records don't have any further details on where the artifact was found, so establishing the exact location of the find is thus impossible. This is a serious problem for archaeology.

In the early 20th century the technology didn't exist to give definitive answers to these speculations. Recently, however, these

unanswered, and possibly unanswerable, questions prompted a group of scientists to use the weapon as the foundation of what they call the Spear Project—an ambitious attempt to use a range of non-destructive high-tech testing methods to better understand the surprisingly sophisticated metallurgy used in the Late Bronze Age to create a wide range of tips and blades.

The tests revealed that the spearhead was made primarily from a tin and copper alloy, but also contained small amounts of nickel, antimony, lead, arsenic and cobalt. The proportion of tin to copper was relatively high, leading the researchers to suggest that the mix was “carefully calculated for creating a resilient weapon”. The results also suggested that Late Bronze Age arms manufacture was a process governed by more than one protocol.

“It is a well-known fact that raw cast spearheads

Continued, P. 9

*Bronze Age Spears ...
Continued from P. 8*



went through a series of manufacturing steps, which ultimately resulted not just in an aesthetically pleasing object such as the spearhead from Kikinda, but also a very effective weapon part with forged blade and razor-sharped edges,” Gábor and colleagues write.

Evidence that the Kikinda artefact was no mere disposable tool is strong. Although its wooden shaft has long since decayed away, the scientists were able to determine that it was likely made from wood sourced from the heart of an ash tree (*Fraxinus excelsior*)—favored because it was a “tough and elastic material” that held firm regardless of whether the spear was used as a lance, or thrown, or used to hunt animals or attack other humans.

In addition, the imaging tests revealed an unknown fibrous material at the top of the shaft socket—strong evidence that the shaft had been replaced at least once during its life.

Some questions still can’t be answered. One of these, in the case of the Kikinda spear, is what exactly happened to the artifact in

the long years after Pokorny donated it, during which it remained in the museum’s collection. It seems at least possible that at some point during the twentieth century well-meaning curators tried cleaning it up, forever altering its composition.

“The results of this analysis were limited by the fact that the original condition of the objects has not been documented and its surface was probably altered by previous restoration,” the researchers state, with perhaps a note of sadness.

Ref: *Gábor Tarbay, János & Maróti, Boglarka & Kis, Zoltan. (2018). Introducing the spear project: The tale of the Late Bronze Age spearhead with wooden shaft from the Marshland of Kikinda, Serbia. Journal of Archaeological Science: Reports. 21. 268-274. 10.1016/j.jasrep.2018.05.028.*

Even Older Spear

Matthew Lybanon, Editor

Archaeologists from Texas A&M University discovered a stone spearhead while rooting around a muddy field 64 km northwest of Austin, Texas. The blade, no longer than 10 cm, was unearthed at the Debra L. Friedkin site, an area already rich with archaeological treasures from the Clovis culture, once believed to be the first peoples in America, and well-known for their Clovis point spears. However, this spearhead predates the Clovis culture. As documented in the journal *Science Advances*, the findings suggest the spearhead dates to between 13,500 and 15,000 years ago, which would make it the oldest known weapon in North America.

Most curious of all, the spear has a distinct stemmed point, much like the stemmed spearheads of the Clovis, which were extremely high-tech, relatively speaking, of course.

Did the spear belong to some predecessors of the Clovis? Or is it a relic from a previous, separate migration? Until very recently, it was widely accepted that the Clovis people entered the Americas from Asia across the Bering Strait land bridge and down through an ice-free corridor around 13,500 years ago. Then, mounting archaeological evidence came to light that suggested people set foot in the Americas considerably earlier than this. This spearhead is another brick in the wall of this mounting evidence. Nevertheless, even with all of this evidence at their fingertips, archaeologists are still not completely certain who these first people were or how they got to America.

“The findings expand our understanding of the earliest people to explore and settle North America,” added lead scientist Michael Waters. “The peopling of the Americas during the end of the last Ice Age was a complex process and this complexity is seen in their genetic record. Now we are starting to see this complexity mirrored in the archaeological record.”

Ref: *M. R. Waters, J. L. Keene, S. L. Forman, E. R. Prewitt, D. L. Carlson, J. E. Wiederhold, Pre-Clovis projectile points at the Debra L. Friedkin site, Texas—Implications for the Late Pleistocene peopling of the Americas. Sci. Adv. 4, eaat4505 (2018).*

MAGS At A Glance

November 2018

SUNDAY	MONDAY	TUESDAY	WEDNESDAY	THURSDAY	FRIDAY	SATURDAY
28	29	30	31	1 Board Meeting, 6:30 pm, St. Francis Hospital	2	3
4	5	6 	7	8	9 Membership Meeting, 7:00 pm, MAGS School of Rock/Auctions/Election	10
11	12	13	14	15	16	17 MAGS Field Trip, Batesville, AR
18	19	20	21	22 	23	24
25	26	27 Show Committee Meeting, 6:30 pm, Agricenter	28	29	30	1

Memphis Archaeological and Geological Society
2019 Littlemore Drive
Memphis, TN 38016

