



THE HOUND'S HOWL

AIKEN GEM, MINERAL and FOSSIL SOCIETY
AIKEN, SOUTH CAROLINA



Volume 56, No.6

EST. 1962

June 2018

From the V.P....

Why did I join the Aiken Gem Mineral and Fossil Society? To share and learn! As a child I was fascinated by the natural world around me. Collecting rocks, gems, artifacts and minerals was a type of time travel, where I could be present in an ancient moment of life on earth or visualize the enormous changes that fold rock and bring the bottom of seas to a mountain top.

And what could be a more essential human trait than the appreciation and pursuit of beauty? When we search for crystals, or marvel at an intricately fossilized fern, we are joining with every other human being throughout history, as if seeing through the same eyes wide with wonder. We are there when the Neanderthal parents gently place an amber beaded necklace on their toddler, or the Egyptian pharaoh views the lapis amulet in his polished bronze mirror. It is to be one with history, humanity, time and space in a tangible way.

And it is fun! The searching and digging is about as addictive as gambling, with the next beautiful find just a few feet away.

In short, AGMFS is a treasure I am very glad I discovered.

See you at the next meeting!

Debra Baer

Summer Excursion

July 26-28

We have been welcomed by Mountain Area Gem and Mineral Association (MAGMA) to attend their 15th Annual Western North Carolina Rockhound Roundup at Camp Stevens located just outside Asheville, NC off of I-26.

Facilities for camping are provided, the French Broad River for water activities and a large pavilion for gathering functions. A number of shows are taking place in the Franklin Area as well as a variety of mines to visit.

A Club field trip update was recently emailed to members with Excursion information. Any changes, etc. will be sent closer to the date and also check out these websites:

<https://xpopress.com/showcase/profile/3/franklin-gem-mineral-showcase> and <http://www.wncrocks.com/magma/magmaupcomingevents.htm>



June 8 Program



Less than two weeks to choose your items to sell at the Silent Auction, decide a minimum price, and fill out the bid sheet. Remember also that these should be hobby related but this is a relatively broad category and can include anything from lapidary tools to books on fossils.

You will find two bid sheets attached to the newsletter: one is 100% to AGMFS and the other, 20% to AGMFS/80% to Seller. The bid sheet should include a description of the item and a seller ID (e.g., your initials); also a minimum bid. Fill out the sheets ahead, it makes it easier to get the items set up by 7 p.m. And if you're not in the selling mode, plan to bring some cash or checks and settle up with our Treasurer at the end of the auction.

We will meet in the Geology Lab, Room 212 (those who are selling should arrive before 7 to setup); each item (or group of items) should have a bid sheet. After the business meeting and during refreshments, members will be able to look over the items and place their bids. When time for bidding ends, those who have the highest bid will take the sheet and the item to Kathleen where the total amount will be recorded and the payment (cash or check) received. Sellers will receive their money via a check in the mail from the Treasurer.

There will also be a raffle for a fluorite specimen 4" x 6.5" from Hardin Co., IL. Tickets will be \$1 each/ 6 for \$5.



Member News

Welcome New Members

Carol M. Jantzen and John B. Pickett
Aiken, SC

Birthday Greetings

June

Jonathan Jolley – 8th
Jerry Lipsky – 11th
Sebastian Prowse – 12th
Charles Lowe – 14th
Kathleen Wallis – 23rd
Christian DuPont – 26th



July

Robin Willoughby – 2 nd	Linda Sarkany – 14 th
Chris Glass – 6 th	Bryant English – 17 th
Debbie Baer – 7 th	Jay Gorday – 25 th
Ralph Willoughby – 12 th	Patti Bennett – 30 th
Walt Kubilius – 14 th	

August

Ken Glass – 1 st	Tom Cox – 18 th
Robert glass – 6 th	Joan Bozzone – 22 nd
Brian Pine – 6 th	Sue Gorday – 23 rd
George Loud – 16 th	Sharon Sterrett – 28 th
Yates Donnan – 16 th	



Happy Anniversary

Ralph and Karin Willoughby – June 13
Jonathan and Sarah Jolley – June 16
Brian and Jessica Pine – June 21
John and Andrea Whatley – June 22
Mark and Nancy Pitts – June 30
John and Linda Kolmar – July 11
Walt and Kathleen Kubilius – August 22



The Fredericks Gallery

Carol Jantzen updated members on the Gallery's progress at RPSEC (May 11, 2018) and distributed pictures of various exhibits including Minerals of Georgia, South Carolina Minerals and Rocks, and Test Your Fossil IQ.

The South Carolina display is in need of more quality specimens; contact Ruth Patrick Science Center if you would like to contribute or loan a mineral or fossil.

Show 'n Tell

One does not often find archeological treasures in a lamp base but leave it to **Jim Sproull**, proficient garage sale



shopper, to discover such an item. For \$20, he took home a treasure trove of Native American artifacts including pottery shards (plain and decorated), holed soapstone cooking stones, hide scrapers, and projectile points.

Connie Bright, originally from Spokane, Washington where she

lived for 35 years, brought a Native American skinning tool and a flat stone with circular impressions



resembling tracks.

She related that the area is rich in artifacts and served as an overwintering place for the Spokane tribe.



From the recent Graves Mt. DMC trip, **Diane Provost** brought a collection including lazulite and colorful iridescent hematite.



Jim Gee found a nice 2.5-inch smoky quartz crystal at the Ashley Farm dig on April 21.

Another yard sale "treasure"

found by **Christian Dupont** were two fossilized horse(?) teeth.



A Girard trip by **John Kolmar** resulted in the discovery of a small drill and point from the Late Archaic Period (5,000 to 3,000

years ago).

And we got to see the 6+-inch beryl specimen Jerry Lipsky found at the Ashley Farm dig.



(Hope I covered everyone here; if not, send me a photo and write-up and will be in a future newsletter.

A Dinosaur Hunter

As members congregated in Room 200 for the May meeting, one couldn't help but notice a good bit of the long lab counter was covered, the contents beneath not



to be seen – “Ah, what treasures lie beneath?”

Soon enough, the unveiling occurred and David Hanes, “The Dinosaur Hunter,” took us on a trip to the Mississippi Embayment during the Cretaceous, 85 million years ago, an inland sea brimming with diverse marine life and reptiles, invertebrates, and

dinosaurs living on an island chain in Appalachia. Food is plentiful but a treacherous landscape for the herds of hadrosaurs as predators such as the velociraptor prowl and search for altricial young and the weak. Their remains are swept by currents into the marshes and further into the deeper channels where they settle at the bottom to be covered by sand and clay.



Time moves on: The Interior Seaway retreats, North America changes shape, the Appalachian Mountains rise, erosion continues, sediments deposit, harden... And we return to the present (2013): Cretaceous outcrops of northeast Mississippi, Coffee Sand, Prentiss County, Booneville, and the fossils discovered by the Stevens family

while digging a foundation for a building.



With the cooperation of the owners and protection of the site offered by neighbors, Dave's meticulous excavation resulted in significant discoveries at the Tolar-Stevens Dinosaur Site. As of 2015 it produced the most

complete dinosaur record from Mississippi to date, as well as a toothless dentary of a nestling dinosaur, ~12% of an adult hadrosaur, and remains of crocodile, sea turtle, bony fish, shark, mollusk and ghost shrimp.

To view the fossils was to complete the story for those who attended that Friday evening. Our thanks to David for letting us experience the discovery.



John, Christian, Dennis and Walt observe.



Sources: MS Embayment;
<http://paleoportal.org/index.php>
and Western Interior Seaway;
Wikipedia
Photos by B. Fenstermacher

References:

<http://magsfieldguide.blogspot.com/2007/07/upper-cretaceous-fossils-of-frankstown.html>

Tolar-Stevens Site: Cretaceous-age duck-billed dinosaur nesting site in the Coffee Sand of Booneville
@MSScienceMuseum#FossilFriday.

<https://twitter.com/MDEQ/status/903614836059369473>

Sohl, Norman F. *Gastropods from the Coffee Sand (Upper Cretaceous) of Mississippi*. Geological Survey Professional Paper 331-C; map p.347.

Figure 20 – *Map of northeastern Mississippi showing distribution of the Coffee Sand and collection localities*.
<https://pubs.usgs.gov/pp/0331c/report.pdf>

Bourdon, Jim. *Late Cretaceous Sharks and Rays of Mississippi*.

www.elasmo.com/frameMe.html?file=paleo/ftown/ms_cret.html&menu=bin/menu_fauna-alt.html

Graves Mountain DMC Report

The Aiken Gem, Mineral, & Fossil Society sponsored a DMC trip to Graves Mountain in Lincolnnton, GA on April 27, 2018 and welcomed a large crowd of between 800 to 1,000 collectors from all over the Southeast who gathered to hunt for treasures. Folks stayed busy all day digging and visiting the various vendors who were set up; there was also a food tent that supplied hungry collectors in need of sustenance. Mineral hunters enjoyed talking and swapping stories about previous digs in various sites.

Collectors have been descending on this site since 1859 for its varied specimens. It was especially popular with geologists from Germany in the late 1880s who published many papers about the minerals found there. In the early 1920s Tiffany and Company began mining for rutile, used to polish diamonds; by the early 60s, Combustion Chemicals, Inc. took over and continued mining for kyanite until 1984, when the property was sold to Pasco Mining Company. Pasco operated the mine until November 1, 1986, at which time the property reverted to Combustion Chemicals. However, mining operations were never resumed. A multinational corporation from Sweden took over the site in 1990 and spent over \$1.6 million in reclamation and clean-up efforts.

The geologic history of Graves Mountain is very interesting. It is part of the Little River series, which is thought to be Paleozoic in age. This series consists of metamorphosed sedimentary and igneous rock. The igneous rocks include andesite and volcanic tuffs. Conglomerates and schist are also present. Fracture zones in the original bedding planes also provided opportunities for large veins of quartz and other crystals to develop. In addition to rutile and kyanite, other minerals found are: a variety of quartz crystals, iridescent hematite, pyrite, lazulite, barite, paragonite, pyrophyllite, barite, variscite, woodhouseite, crandallite, strengite, phosphosiderite, cacoxenite, etc.

Source: www.gamineral.org/ft/commercial/ftgravesmain.html

John and Linda Kolmar

Aiken Gem, Mineral and Fossil Society

Your Name

Can be purchased at B & S Engraving
3733 Washington Rd., Martinez
706-863-7501

Our badge design is on file.

Hunting for Fossils in Harleyville, SC

Nine AGMFS members made a trip to Harleyville, SC, to join fellow DMC members for a dig sponsored by the Lowcountry Gem & Mineral Society. The sought after treasures were fossils from the spoil piles of the LaFarge Quarry dug at a depth of 80 feet from the Harleyville Formation and the Cross Formation (Middle Marine Eocene).

The quarry itself is well known as being a site where fossils dating from 250,000 to 500,000 years ago could be found. Unfortunately, the quarry itself is privately owned and off limits; however, the spoil piles (which are not on the quarry site) still yield many treasures.



Christian Dupont was the first to taste success with a vertebra he found within a few minutes of our arrival. Herb Martin also found an interesting specimen of 2 sharks teeth embedded in matrix. Just about everyone was successful in their hunt.

Linda Kolmar
Photo by Chris Glass

Summer Travels

M.A.G.M.A.

Crabtree Emerald Mine
June 22-23, 2018

Kentucky Geode and Trilobite Dig
Rock Swap and Cookout
July 6-7, 2018
Danville, Kentucky

15th Annual Western N.C. Rockhound Roundup
July 22-29, 2018
(Camp Stephens, off I-26 near Asheville, N.C.)

Aiken GMFS Summer Excursion – July 26-28
www.wncrocks.com/magma/magmaupcomingevents.htm ■



Franklin Gem & Mineral Showcase

Echo Valley Gem & Mineral Show

July 25-29, 2018

6456 Sylva Rd., Franklin



Highlands Road Gem Show

July 25-29, 2018

1602 Highlands Road, Franklin



Franklin Faceters Frolic Macon County Gemboree

July 26-29, 2018

1288 Georgia Rd., Franklin



G&LW Gem Show

July 26-29, 2018

Wholesale Only

6295 Sylva Rd., Franklin

Spruce Pine Shows

54th NC Mineral and Gem Festival

August 4-7

Pinebridge Coliseum, Spruce Pine, NC



34th Grassy Creek Mineral & Gem Show

July 28-August 5

Parkway Fire & Rescue fire station

136 Majestic View, Spruce Pine, NC

<http://sprucepine.com>



History Day

July 21, 10-4

Learn about how museums collect artifacts and create exhibits during History Day. Plus, meet historians and go on a Behind-the-Scenes Tour of museum collections storage. More info soon!
<http://scmuseum.org/events/upcoming-events/>

Dahlonega Gold Museum Historic Site

Appalachian Jam

Saturdays 2 p.m. - 5 p.m.; May 5-Oct 8, 2018

Mountain music pickers and singers flock to the Dahlonega Gold Museum for the **Appalachian Jam**. Tour the museum then enjoy the live entertainment in the courtyard. Bring a folding chair and listen or bring your instrument and join in!

www.gastateparks.org/DahlonegaGoldMuseum



Cumberland Caverns

Thirty two miles of caves and underground passageways. Daily 1.5-hour walking tours leave every hour on the hour. Open 7 days a week.

1437 Cumberland Caverns Road, McMinnville, TN

<http://cumberlandcaverns.com>



Providence Canyon

State Outdoor Recreation Area

8930 Canyon Rd.

Lumpkin, GA

Georgia's "Little Grand Canyon"

Tallulah Gorge State Park

338 Jane Hurt Yarn Drive

Tallulah Falls, GA

One of the most spectacular canyons in the eastern US is 2 miles long and nearly 1,000 feet deep.

<http://www.exploregeorgia.org>



Dixie Mineral Council Field Trips

The Southeast Federation of Mineralogical Societies, Inc

The Friendly Federation - Founded in 1976 to serve
DMC Program of the SFMS Field Trip Committee
Copyright © All rights reserved.



An Official Field Trip of the Huntsville Gem & Mineral Society (Huntsville, AL) (HOST)
An Official Field Trip of the Aiken GMFS

Saturday, July 28, 2018

Hogg Mine

Troup County, GA

9:00 AM - 5:00 PM

Fee Site – Adult 17+ is \$35

(Information will be emailed to members.)

zOrb 65x Digital Microscope

by Fred Haynes

I purchased a new toy in March. I acquired a Carson zOrb 65x Digital Microscope (based on 21-inch monitor).. Although not a tool for advanced photographers, I hoped that it would give me a simple tool for illustrating details I could not depict well with my Nikon. And for \$50 I decided it was worthy of an experiment.



The egg-shaped camera arrived with virtually no instructions, but included a note to upload software. Once uploaded the camera almost works by itself. Heck, I even figured it out! Open the software on the computer and plug the camera into a USB port. The camera LCD lights immediately come on and the image from the camera pops up onto the screen. The digital microscope comes with a focus ring and two plastic attachments that help stabilize the camera above the object to be photographed. Depress the shutter release atop the camera and bingo, a jpg picture file is stored on the computer.

I decided that my first subject mineral would be the millimeter-sized bright green pyromorphite from the



The field of view is about 2mm and the crystals average 200 microns in length.

Manhan Mine in Loudville, MA, a site detailed in the November 2017 newsletter and one the club plans to visit on its upcoming June trip. If you are lucky there can be bright orange wulfenites with the pyromorphite. I was not lucky!

OK, that is really neat and a great improvement over any standard lens or phone camera, but the zOrb digital camera does have serious limitations. The depth of field is very limited. You can surely see that only a small portion of the pyromorphite spindles are in reasonably sharp focus. This is accentuated by the lack of a tripod to steady the camera. I was, however, fairly impressed by the lighting provided by the LED lights mounted inside the device and the color matches the specimen well. I cropped the pictures a bit, but did nothing else to them once on the computer.

If you can accept that this is more of a toy and a tool for viewing small objects and not a camera capable of producing high quality images then it may be worth the \$50 that it costs. In addition to the single shot

mode with which all these pictures were taken, the camera has a timer option and also a video mode: imagine watching a tiny insect crawl across a leaf. I have yet to try these operating modes. I do not regret my purchase, and I imagine you will see more of zOrba's work in future newsletters. She's beside me right now!

You can learn more about the zOrb digital microscope by visiting this webpage <https://www.carson.com> or by watching this instructional video on youtube <https://www.youtube.com>.

Adapted from the article published in the Wayne County Gem and Mineral Club News, May 2018; Fred is the Editor. For the complete article go to the club website www.wcgmcc.org.

■

Bench Tips by Brad Smith

Brad Smith's books are at <facebook.com/BenchTips/> or on Amazon.com



SAWING SMALL TUBING

When making a hinged bracelet, I needed to cut 16 pieces of small diameter silver tubing. These were to be just approximate lengths and trimmed to final size after soldering. Not having a tube cutter, I had trouble holding the tubing on the bench pin while trying to saw through it.

So here's what I did. I drilled a hole in the side of the bench pin just large enough for the tubing to slide into and almost as deep as the length of cut tubing I wanted. Sawing became quick and easy. With my free hand, I inserted the tubing and held it from rotating while sawing off each length.



EFMLS Wildacres Fall Workshop



Registrations for the Fall EFMLS Workshop at Wildacres are now being accepted by Registrar Suzie Milligan. Fall is a lovely time of

year "on the mountain". We encourage you to come and see for yourself.

Each workshop week consists of a "Speaker-in-Residence" who gives six talks during the week plus the opportunity to participate in one or two classes, a field trip, auction, lots of time to sit in the rocking chairs and talk, visit the canteen or explore the wonderful area around the property.

The Retreat is located about an hour north of Asheville, NC and about 2 hours from Charlotte, NC. Meals are served family style, bedrooms all have a private bath and are comfortable. Days are filled with the sounds of people laughing and talking, sometimes music from a visiting musical group, and the chirping of birds.

The cost for the week at Wildacres is \$425 which includes your room and board plus a gratuity for the permanent Wildacres Retreat staff. Instructors volunteer their time and talents and many have returned to this idyllic spot several times.

A list of classes/instructors and registration form can be viewed in the June-July issue of *EFMLS News* Website <http://www.amfed.org/efmls/>.

I hope to see you "on the mountain" this September 3 - 9. But hurry! Class size is limited and assigned on a first-come, first-served basis.

Steve Weinberger, Wildacres Chair

Adapted from EFMLS Newsletter, June-July 2018



Volcano Libraries:

Could help plan for future volcanic crises.

Crystals from the 2010 Eyjafjallajökull eruption have demonstrated a new way to recognize pre-eruption signals at Eyjafjallajökull and potentially other, similar volcanoes around the world.

A team of volcanologists from the University of Leeds, Iceland and the British Geological Survey have studied the chemistry of the crystals flung out during the early stages of the 2010 airline-grounding eruption in Iceland. Because the eruption was so well-monitored, geologists knew precisely when their samples were erupted to within a six-hour eruption window.

By analyzing the records in the crystals and working back from the time of eruption, they were able to read the magma's history in time and location, which allowed them to interpret how the volcano behaved, and magma built

up, in the six months beforehand. Their reconstruction of what was happening deep underneath the ground aligns with observations made at the surface at the same time. This opens up the possibility of studying other, older erupted materials to get a long term record of how the volcano has typically behaved in the run-up to previous eruptions.

The same techniques could potentially be applied to numerous other volcanoes, creating a 'library' of volcano histories and could greatly improve understanding of the critical, pre-eruptive phase of volcano activity, which is key in making accurate forecasts of eruptions.

Full story at University of Leeds. "Volcano 'libraries' could help plan for future volcanic crises." *ScienceDaily*. *ScienceDaily*, 24 May 2018.

<www.sciencedaily.com/releases/2018/05/180524112319.htm>.

REFRESHMENTS 2018

DATE	NAME	PHONE
1/12	cancelled	
2/9	Sally & Jerry Lipsky; S.Sterrett/D.Dunlap	865.382.2159© 803.331.4882©
3/16	B.Fenstermacher; Chris Glass	803.646.6957© 706.284.9239©
4/13	Mark/Nancy Pitts; Herb/Pat Martin	803.270.8719© 803.648.0891
5/11	Linda Sarkany; Kathleen Wallis	803.642.1284
6/8	M. Hodge/D.Scherer; Jessica Pine	803-649-0174 717-991-4241
9 /14	Chris Glass;	706.284.9239©
10/12	Margaret Marion Jim Sproull;	803-641-0816
11/ 9	Debra Baer	803-295-7897
12/14	POTLUCK SUPPER	

AGMFS Officers and Committees 2018

President: Walt Kubilius
(803) 643-3281/president@aikengmfs.org
Vice President: Debbie Baer
(803) 295-7897 / vicepresident@aikengmfs.org
Secretary: Sharon Sterrett
(803) 649-0174 / secretary@aikengmfs.org
Treasurer: Kathleen Wallis
(803) 643-3281/ treasurer@aikengmfs.org
Editor: Barbara Fenstermacher
(803) 649-0959 / houndshowl@gmail.com
Federation Liaison: Barbara Fenstermacher
Field Trip Committee/ DMC Liaison: John Kolmar, Jim Gee, Debbie Baer and Herb Martin
(803) 642-3767 (John) / lkolmar@gmail.com
Webmistress: Patti Bennett webmaster@aikengmfs.org
USCA Liaison: Walt Kubilius
Librarian/Bag'nTag Coordinator: Jerry Lipsky



Hound's Howl
Aiken Gem, Mineral and Fossil Society
P.O. Box 267
Aiken SC 29802-0267

FIRST CLASS MAIL

June 2018

Program: Silent Auction

June 8 at 7 p.m.
Sellers at 6:30

Room 212, USCA Science Bldg.



The **Aiken Gem, Mineral and Fossil Society** operates as a non-profit, educational organization affiliated with the American Federation of Mineralogical Societies, Inc. (AFMS), the Eastern Federation of Mineralogical and Lapidary Societies, Inc. (EFMLS), and the Southeast Federation of Mineralogical Societies, Inc. (SFMS).

The purpose of the Society is to stimulate interest in collection of gem and mineral materials and fossils and to impart knowledge of lapidary work, mineralogy, paleontology, collecting and classification of minerals and fossils, and the application in the art so greater pleasure may be derived from these activities.

The Society meets at 7:00 p.m., second Friday of the month, in Room 200 of the USC-Aiken Science Building located in the University complex on University Parkway in Aiken. There are informal meetings in July and August. The annual dues, payable by December 31, are \$20 for a family membership, \$15 for a single adult membership and \$2 for a junior/student member.

The *Hound's Howl* is published ten times a year by the Aiken Gem, Mineral and Fossil Society. An annual subscription is an additional \$10.00 for posted delivery. Otherwise it is sent via email delivery. Unless otherwise noted, permission is granted to reprint material from this bulletin for non-profit usage provided the sense or meaning of the material is not changed and proper credit is given to our club and the article's author or photographer. Material written by the editor may not have a by-line.

The Society's web page, www.aikengmfs.org offers more information about the history of the club, our annual Gem, Mineral and Fossil Show, education links and community projects. See photos of our field trips and events on our **Facebook** page.