Message from the President

Mother Nature is up to her old tricks with changing the weather quicker than one can change their mind. This can be a risk we all must endure when we are out in the fields, a quarry or creek looking for that special specimen. We all must be ever watchful of the rapidly changing weather. Please be prepared for the worst so we all can see each other again along with the fine specimen's each has found!

This month is the start of the 2016 Show meetings. Those that volunteered to be part of the Committee will be meeting at 1815 or 6:15 PM at the Nature Center. This first meeting will set the tone on how we will approach our 26th Annual Show. This promises to be a good start for the next show planning.

On the web there are many sites that have excellent information on our love of rocks, cutting, jewelry and many other factions of the hobby. If there are some that are worthy of sharing please do this at each meeting. Sharing the sites names and visiting them helps support their livelihood and the importance of their sites message.

This all helps keep the hobby alive. See everyone Tuesday for an outstanding program - Tourmalines of Brazil!

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Next Meeting:
April 28, 2015@7:00 PM
2016 Show Committee Meeting@6:15PM

Program:
Tourmalines of Brazil
Bob Farrar

Refreshments:
TBD

Clearwater Nature Center, 11000 Thrift Road, Clinton, MD.
MARCH MINUTES
Submitted by Linda Holden

DATE:  Meeting was called to order at 7:01pm

VISITORS/NEW MEMBERS:  --- No visitors.

MEMBERSHIP:  Polly has been unable to get a list of new members. Rich will talk to Michael. Michael is working on a current list. Polly and Rich need to have the list.

NEWSLETTER:  Tim is aiming for the 3rd week of the month to send out the newsletter.

FIELD TRIPS:  Jim has field trips scheduled for Vulcan, Graves Mountain, the Super Dig in Sterling Hill, and the National Limestone Quarry on June 13th. Tina and Harry have information about the Mushroom Festival and Agate Hunt in Kentucky during April. Jim asked members to make suggestions for new sites or ones we haven't gone to in a while.

TREASURER:  No changes.

MINUTES  Approved as written

PROGRAMS:  Still no volunteer for programs. [Carol volunteered during old business]. Tonight's program is "A 500 Kilometer Trip Across Tennessee" done by Ed Masuoka. Refreshments provided by Jan and Bob Simmons.

WEBMASTER:  No report.

OLD BUSINESS:  Michael reported that we received positive feedback on our recent show. He has not had the time yet to contact the Arena for a date for next year's show. Committee hasn't met yet. Michael would do programs if someone would take over the show. We are still planning to shoot for President's weekend again. Some things we need to do now. Gary said the Committee should meet once a month. [Rich informed me after the meeting that the committee will meet at 6:15 pm each month right before our regular Rock Club meeting.] We will need club members to volunteer to do various things that need to be done. Important thing is we need a date for the show. We need volunteers for next month's program and refreshments. Gary volunteered to give a recap of Eastern Federation meeting, but it's not a whole program. Anything in the library of videos? Dave said Rich should have a list from the Eastern Federation. Michael said he would get a copy. Carol volunteered to take over programs!! (yeah!). Carol asked Tim to redo a previous program. Michael said Bob Farrar did a show on amethyst. Excellent. Maybe he can do another program. Michael will check with him.

NEW BUSINESS:  Rich had information from CNN that there were 2 major hits in Australia by meteors. He tries to send out information on interesting articles he sees.
Example: A man in Australia found a huge piece of gold after being kicked out of the house. St. Mary's County had a book sale. He had about 30 copies of old journals on the archeology of Maryland. If you want copies of articles let him know. Gary reported on House Bill 713. Many sent letters to the House Judiciary Committee. It deals with a ban on ivory. The bill attempted to redefine ivory. Could include deer teeth used in taxidermy, shark teeth, etc. It also criminalized anyone caught with or trying to sell or trade. You would be a felon. On March 4th it came up for discussion and a number of people testified against it. It ended up not being called for a vote. It now lies in a drawer of the chairman desk. It could get called back at some point. We will have to watch. There are similar bills in 13 states. Bills have passed in New York, New Jersey, and California looks like it will get the necessary votes. So there is a pattern of legislation. Gary is going to the Eastern Federation Convention as our representative. Cindy is going to the MGS meeting. Dave suggested the need to raise the insurance to 5 million dollars so we can get into more places. Low insurance is an obstacle to getting into some places. Question was raised about Rock and Mineral patches and stickers. We still have patches.

ADJOURNED: Meeting was adjourned at 7:45 pm.
ROCK TALK

EFMLS/AFMS NEWS by Timothy Foard

The April newsletter of the AFMS has information on the three DVDs available for club libraries. Also included is the recognition of AFMS rockhounds of the year, the importance of a positive outlook when it comes to safety matters, additional book ideas for young rockhounds, and the AFMS Code of Ethics.

For these and other information, visit www.amfed.org.

The EFMLS Newsletter for April has the announcement of Alice Cherbonnier of Baltimore as the new AFMS Scholarship Coordinator. Also, an article on how to behave in order to get a collecting site closed to future collecting. The Gem, Lapidary, and Mineral Club of Montgomery County recognized Mark Dahlman as 2015 Rockhound of the year. There is an excellent article on mineral collectors of colonial America.

For these and other information, visit www.amfed.org.efmls

Upcoming Shows and Events: 2015


May 9 - South Penn Spring Rock Swap, sponsored by the Franklin County and Central PA Rock and Mineral Clubs, South Mountain Fairgrounds 1.5 miles west of Arendtsville, PA on Route 234. 8:00 AM-3:00 PM.


May 16-17 - Cape-Atlantic Rock Hounds Annual Spring Gem, Jewelry, Rock, Mineral and Fossil Show. 2641 Cologne Ave. Mays Landing, NJ.

May 30 - 26th Annual Chesapeake Gem and Mineral Show, hosted by the Chesapeake Gem and Mineral Society. Ruhl Armory, York Rd at I-695, Towson, MD

June 6 - 64th Semi-Annual Spring Minerafest Show, sponsored by the Pennsylvania Earth Sciences Association. Macungie Memorial Park, Macungie, PA
Help save a local museum with "Raise The Roof" campaign  By Briana Conner

The Ben E. Clement Mineral Museum in Crittenden County, Kentucky is in danger of closing due to roof damage from the past winter storms. A new roof is needed to prevent further water damage and to protect the mineral exhibits and collection housed there. The P’Pool family has organized a fundraising campaign, called the “Raise the Roof” campaign, to obtain donations in order to pay for an estimated $50,000 needed to replace the roof. If the roof does not get replaced, the museum will close and the collection returns to the Clement family. Anyone interested in making a donation can either visit the museum or by mailing a donation to: Ben E. Clement Mineral Museum, P.O. Box 391 Marion, KY 42064

New layer discovered in Earth's mantle: 'Superviscous' region that is five quintillion times thicker than peanut butter found  by Jonathan O'Callaghan for MailOnline

Research carried out by scientists at the University of Utah revealed a new layer within the Earth’s mantle. This new layer is an extremely viscous subdivision of the mantle which exists at a depth beginning at 410 miles to a depth of 930 miles. Experiments were carried out by crushing minerals under enormous pressure to simulate conditions present at these depths. One of the minerals, ferropericlase, present in the earth’s mantle became increasingly viscous at these experimentally induced pressures at 410 miles and its interaction with another mineral, bridgmanite, at 930 miles increases the viscosity 300 times. This super-viscous zone—100 billion billion times the viscosity of peanut butter—causes movement of the earth’s crust and the solid upper parts of the mantle (subduction) under the mantle to pool at these depths, particularly under Indonesia and under the Pacific coast of South America. This also makes it hard for the mantle to mix and evenly distribute heat. As a result heat accumulation makes the earth’s interior hotter than previously thought. The earlier estimate has the temperature near the mid region of the mantle as 1540°C (2900°F). The new estimated temperature at the viscous zone is 2150°C (3900°F). This new layer is more defined by the density of the minerals present and less by the minerals’ composition.

Zombie worms' feasted on ancient bones, study says  by Natalie Crofts
http://www.ksl.com/?nid=1012&sid=34275077

Contributing to all of the conditions which prevent the formation of most fossil bones, a new study found that a marine worm, Osedax—also known as the zombie worm—is a contributing factor for the rarity of vertebrate marine fossil bones. When living specimens were first discovered in 2002, researchers initially believed that the worms co-evolve with whales (around 45 million years ago). However, Plymouth University (UK) scientists recently identified borings made by these worms in the bones of marine reptiles dating to the Cretaceous, 100 million years ago. The worms feed on bone and cartilage before the remains get a chance to become buried and fossilized and may be responsible for significant loss of data on a global scale.
Field Trip Report
A John Wolf Memorial Trip:
Odessa, Delaware
Timothy Foard

On the morning of April 11 about a dozen members from various local clubs in Delaware and Maryland descended upon the cornfield which has become well known locally for producing petrified cypress wood. Since digging tools were not allowed, children were allowed on this trip. My son Benjamin came with me, making this his first official club field trip. The trip leader, Robert Ertman, showed the newbies what to look for because the wood blends in with the dried corn stalks which littered the field. He also gave the kids a polished specimen collected from previous trips. It polishes well after a few weeks in a tumbler.

As we walked about the field looking for fossil wood, we found many of the smaller pieces only a few yards from where we were parked. I was told that the owner has a petrified stump in his barn. Finding a piece that large was unlikely, but pieces several inches long can still be found with persistence. We walked across the field, towards the opposite side near an adjacent field. Ben found a deer leg bone and was quite excited about his find. He managed to find a couple of pieces of wood (with a little help). I managed to find a few pieces several inches long, including one piece which I believe is part of a cypress knee, a 3-pound chunk that was the largest piece found on this trip, and a rock that appeared to show evidence of flaking, possibly a scraper. Ben found some pieces of red agate, as did some of the other collectors when we finally got back to the car.

The fossil wood found at this locality is entirely cypress; no other tree species have been found there to date. There is debate as to the age of the wood. Most believe the wood dates to the Pliocene-Pleistocene, but a few argue a much earlier date, possibly as early as the Cretaceous because the bases of some of large specimens were present in these sediments. The absence of index fossils, its occurrence in re-deposited material, and the lack of research (whether funding or interest or both) by geologist makes it difficult to determine the age of the fossils.

All in all, we had a very pleasant time; the weather was beautiful, and I am grateful for the opportunity to visit and collect some fossil wood.
Glaucanite
Timothy Foard

Calcareous sandstone containing glauconite (dark colored) granules, Prince George’s County, Maryland

A greenish mineral with the formula 
\[(\text{K,Na})(\text{Fe}^{3+},\text{Al,Mg})_2(\text{Si,Al})_4\text{O}_{10}(\text{OH})_2\]

Glaucanite is a member of the mica group. The name comes from the Greek, “glaukos” for blue-green, first coined in 1828 by Christain Keiferstein, but Alexandre Brongniart used a similar word, “glaucanite”, to identify green sand. Greensand is often used today to describe sedimentary rock, usually sandstone, which contains enough glauconite to impart a greenish color to the deposit. Occasionally, the mineral may be yellowish green or even colorless in rare instances.

Glaucanite rarely occurs as crystals; when it does, it crystallizes in the monoclinic system. Despite its abundance, this is not a mineral collectors seek out. Most of the time, it occurs as minute round grains or pellets. It is a soft mineral, with a hardness of 2, has a dull earthy luster, perfect cleavage (like mica), and a density of 2.4-2.9 g/cm³.

The mineral forms under relatively shallow oxygenated (50-100 meters) marine shelf environments and is often an indicator of slow sedimentation. It is derived in part from detrital biotite \((\text{K(Mg,Fe)}_3(\text{AlSi}_3\text{O}_{10})(\text{F,OH})_2\), which is a mica and by alteration within the environment under reducing conditions. Glaucanite is largely absent from freshwater environments. It occurs in large numbers in sandstones, but is not restricted to these rocks; they are also present in some limestone and especially in unconsolidated marine deposits, most of which were laid down during the Cretaceous and the early part of the Tertiary Periods. Some notable deposits are found in the UK, France, Italy, New Zealand, South Africa, and the US. In the US large deposits are found in Alabama and Texas, and the Mid-Atlantic region. There is only active greensand mine in the US, and it is found in New Jersey.

Glaucanite has limited use as a pigment, and had been used for this purpose in Europe for centuries. Other uses for the mineral are as fertilizers and as a water softening agent because of its ability to remove iron from solution.

References

Glaucanite \((\text{K,Na})(\text{Fe}^{3+},\text{Al,Mg})_2(\text{Si,Al})_4\text{O}_{10}(\text{OH})_2\) - RRuff
http://rruff.info/doclib/hom/glaucanite.pdf
Glaucanite - Sandatlas
http://www.sandatlas.org/glaucanite/
Glaucanite: Glaucanite mineral information and data.
http://www.mindat.org/min-1710.html
Glaucanite (Greensand) The Delaware Geological Survey
http://www.dgs.udel.edu/delaware-geology/glaucanite-greensand
Member’s Finds
Some of the fossils collected by Ed Masouka from various geologically diverse locations during his 500 kilometer trek across Tennessee.

Collected any interesting specimens? Send a photo or two to the editor at bmorebugman@yahoo.com for inclusion in the next issue of Rock Talk.
The Southern Maryland Rock and Mineral Club

Meetings take place on the 4th Tuesday of each month at 7:00pm

Clearwater Nature Center, 11000 Thrift Road, Clinton, MD.

For More information, call:

(301) 297-4575

We’re on the web:
SMRMC.org