

Southern Maryland Rock and Mineral Club



Rock Talk



November, 2014



Message from the President

Rich Simcsak

November - we will elect new officers for 2015. To get the true consensus for our club's future, please have maximum participation at this meeting for this event. The selection committee is looking for additional volunteers for selected positions - like the President's - for a complete election selection package. Polly will share with us those that have volunteered to take the club into the next year.

December - the End of the year Pot Luck Dinner and Gift Exchange. Start thinking about that special dish. We will be asking for tentative "Pots of Luck" members desire to bring. Typically this is a fantastic spread of good cooking! The Gift Exchange will be the second part of the December meeting. Those that decide to participate should have a gift that is "Rock/Mineral/Jewelry" related. Some very interesting gifts have been seen at these exchanges. Please plan early for that inquisitive and interesting gift.

The 25th Anniversary Show - 14 February 2015 - The Showplace Arena! We are beginning the advertising and getting the word out to the venders. IF there are ideas of getting the information to the "masses" in a new or unusual way - PLEASE SHARE IT! We will discuss the show for the next three meetings and be looking for that

cadre of dedicated volunteers that every year is essential in making the show a success. We all need to be planning for another successful show - we are all part of that team and I want to thank everyone now for doing so!

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Next Meeting:
November 18, 2014 @ 7:00 PM
Program
Penny Masuoka, "Meteoritic Impact Structures"

Refreshments
Lorna and Mel Larson.

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

OCTOBER MINUTES

DATE: October 28, 2014; Meeting was called to order at 7:05 pm by President Richard Simcsak.

VISITORS/NEW MEMBERS: --- Joe Davis' sister-in-law who lives in Tucson (AZ).

OCTOBER MINUTES: September meeting Minutes accepted (after one correction --- Dave Lines will not redesign show flyer as erroneously stated in minutes.)

MEMBERSHIP: No Report.

NEWSLETTER: Some RockTalks sent out were kicked back due to wrong/no good email addresses.

FIELD TRIPS: (Jim White) --- Last minute notice to the Flintstone Quarry in Flintstone, MD on November 11. Annual trip to JMU (James Madison University) will be Jan 31, 2015.

PROGRAMS: Our Program Chairman Penny M. will not be able to participate in our club next year due to conflict with her new job. She will present the November program. Tonight's program is 2nd half of DVD about Colorado's Sweet Home Mine Search for Rhodochrosite. Snack's tonight provided by Polly Z. and Carole R. The December meeting will be on **Thursday December 11, at 6:00 pm** for a potluck and gift exchange.

ELECTION: September - October for nominations.

WEBMASTER: Bob D. said site is up-to-date

with \$1 off show admission coupons available. Vendor applications will be forwarded soon.

OLD BUSINESS: Rock Show --- (per Michael Patterson) contract for The Show Place Arena has been signed for Feb 14, 2015. Show times – 10 AM to 5 PM. Vendors can drive into building to unload (and re-park outside) starting at 6 AM Sat morning. Club member volunteers needed for demonstrations (gold panning, flint knapping, jewelry making, cabochon making), ticket taking, collecting door prizes from vendors, announcing and passing out door prizes, etc. Boy Scouts will have a special area set-up by CWNC for Merit Badge. Admission (big discussion ensued) --- agreed on: Adults - \$5; Seniors (65+) and students (13 to 17) - \$4; Scouts in Uniform and children (12 and under) – FREE. \$1 off coupon also available on website. Vendors tables --- \$30 per table. Rock Club member tables (if attended 4 club meetings in 2014) -- 1 table free and rest at \$30. [discussion here re Lapidary Club --- concern that Lapidary Club has become a separate, independent organization, but does not participate in Rock Club or work for Rock Show --- Motion by Lorna L. passed 10 to 7 that said “This year 2015 Lapidary Club members will get one free table if attended 4 meetings of Lapidary Club, but Next year 2016, Lapidary Club must be a paid member of both Rock club and Lapidary Club to get a free table (after attending at least 4 meetings of either or both clubs in combination)] Bob D. will email our 400+ previous show attendees and offer them a chance to be a vendor --- in order to increase the number of show tables --- our goal is 200+ vendor tables. The Show Place Arena rent is \$6,400 for the one day show. Tables are 6 feet long by 30 inches wide per Harry L. Show Advertising has begun by Dave L. --- Notice sent by Michael P. to Rock and Gem Magazine. Re query about a show notice in MD-NCPPC Newsletter, Dave will contact them. Will send show notice to EFMLS a.s.a.p.

Dave distributed a sheet of proposed Press releases for various publications.

NEW BUSINESS: None.

ADJOURNED: Meeting adjourned at 7:50 PM.

Upcoming Shows and Events

November 22-23: 23rd Annual Gem, Mineral, and Fossil Show sponsored by the Northern Virginia Mineral Club. George Mason University Student Union II Building, Braddock Road and Rte. 123, Fairfax, VA.

November 22-23: Prehistoric Enterprises: Harrison County Parks and Recreation Complex, 43 Recreation Drive, Rte. 19 South, Clarkseburg, WV.

November 29- December 1: Rock and Mineral Weekend, organized by the Morris Museum Mineralogical Society, Morris Museum, 6 Normandy Heights Road, Morristown, NJ.

February 14: 25th Annual Mineral Jewelry, and Fossil Show, hosted by the Southern Maryland Rock and Mineral Club, the Show Place Arena, 14900 Pennsylvania Ave., Upper Marlboro, MD

Upcoming Field Trips

“Saturday, Jan 31st is our annual trip to James Madison University to visit Dr. Lance Kearns. For those new members or anyone who has never been, Dr. Kearns has one of the most complete Geology labs around, including x-ray diffraction equipment for definitive mineral ID. We take our specimens to him and he uses his knowledge and equipment to ID them. He also has surplus specimens for sale at very reasonable prices, a great opportunity to add to your collections. If that's not enough the school has a GREAT mineral museum, worth the trip all by itself. One of the few places in the WORLD where you can see Turquoise CRYSTALS.!!!

We will be doing something a little different this year, a combined trip with the Montgomery County club, suggested by Jonathan Harris, their trip chair, and whole-heartedly endorsed by Dr. Kearns (it's probably one more Saturday that he will have free). Hopefully this won't make for too big a group and everyone will get a chance to get their specimens identified.”

Interested? Contact Jim at whitejs1@verizon.net

The Southern Maryland Rock and Mineral Club's Annual
Mineral, Jewelry & Fossil Show
\$1.00 Off Admission

Door Prize Entry Form Drawings every half-hour, must be present to win

Name _____ Please Print Neatly - THANK YOU

Email Address _____
 (if you wish to receive an email notification next year)

EFMLS/AFMS NEWS by Timothy Foard



The EFMLS Newsletter for November has an article on the importance of paying attention to whatever activities we perform. Also in the newsletter are applications for nominations for the Each One Teach One and the All-American Club Yearbook Awards. There is also information on the 2015 EFMS Convention (Hickory, NC) and an invitation to join the American Land Access Association, which was formed to fight for the right of rock hounds to collect on public lands.

For more information, visit www.amfed.org.efmls



The November newsletter of the AFMS features the introductory address from the new president, Marion Roberts and the departing comments from the former president, Richard Jaeger. Also in the newsletter is information on the BEAC (bulletin editors and author contest), announcement of AFMS rockhounds of the year and a calendar for regional federation shows from 2014-2016.

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

Safety in the Field:**Hypothermia**

Timothy Foard



Many years ago, during my time with the Army National Guard, I participated in a compass navigation exercise. My platoon was split up in pairs, and each assigned a course with two destination points so that each person has the opportunity for hands on navigation. One person used the compass to send the other person in the direction of the destination point. The terrain was wooded and very hilly and the activity occurred during mid-June in one of the southern states. The first part of the course went fairly quickly; my partner reached his destination despite the challenging terrain. It was now his turn to send me off on a transit. Shortly after starting this second leg of the course, a heavy, but brief thunderstorm drenched us. Since it was hot, it was quite welcoming. Long after the storm passed, it was still overcast, our clothes not yet dried, and it was taking much longer to finish this second leg, although the terrain type remained the same. So much longer it took, in fact, that the navigation instructors went out looking for us. When they found us, one of

the officers immediately grabbed the sleeve of my uniform. He shouted to the other officer, “his uniform is still damp”, and they abruptly terminated the field exercise for the day. Their concern was that the conditions were present to trigger the onset of hypothermia.

Hypothermia is a life-threatening condition resulting from the body’s core temperature is lower than the minimum needed for normal metabolism. In humans, this minimum temperature can vary from 97°F to 95°F. When the body’s core temperature reaches about 95°F, a mild form of hypothermia occurs. Symptoms of mild hypothermia include involuntary (but controllable) shivering and numbness of the fingers, toes, nose—the more distal areas of the body. At first, the body restricts blood flow to the extremities to conserve heat in the vital organs. If the body continues to lose heat, this mild form of hypothermia morphs into a moderate and then severe form of hypothermia. Moderate hypothermia, which occurs when the core temperature ranges from 92-95°F, is characterized by a lack of coordinated motor skills, such as fumbling hands and slurred speech, along with fits of uncontrollable shivering. Mental confusion, which can result in poor decisions in the face of crisis (such as the shedding of clothes), is also a sign of worsening conditions. When the body core temperature reaches 86-92°F, it becomes difficult to move because of reduced blood flow, the pupils become dilated, the pulse slows and become very weak, the person’s skin is pale or chalky, and there is a tendency for the person to curl up into a ball in an effort to conserve heat. This is hypothermia in its severe form. If not treated, shallow breathing and unconsciousness ensues, resulting to death from cardiac arrest. Often in the final stages, the person becomes semi-conscious and feels the returning warmth. The warm feeling is the result of the body organ system shutting down, including the nervous system and thus the loss of the cold feeling. The danger in hypothermia lies in the fact that it can occur in warm or even hot regions that rarely receive

freezing temperatures. In northern regions, hypothermia often occurs when either people were caught off guard by unexpected extreme weather patterns or were prepared, but the precautions were not adequate. The most recent data in the CDC Mortality Database from 1999 to 2005 yields some obvious results, such as Wyoming and Montana: two states with the most cold-related deaths, New Mexico and the District of Columbia were also high on the list of regions with incidents. In western regions, conditions leading to hypothermia often occur after sunset, when nighttime temperatures drop rapidly, whereas in the southern and mid-Atlantic regions, rapidly changing weather patterns will trigger these conditions. In urban settings emergency workers sometimes missed the signs of severe hypothermia because victims are often intoxicated or otherwise psychologically impaired. Many of the fatalities occurred at detoxification centers before their hypothermia was recognized.

Hypothermia more likely occur in men more than in women, and increases with age, although infants are also a high risk group. People who spend long periods of time outdoors (sounds familiar?) are also at risk. There is at least one reason the cold kill people regardless of locality: alcohol. Heavy drinkers are especially vulnerable to severe and frequently fatal hypothermia. Alcohol, which creates a brief “warming” sensation by expanding the blood vessels, accelerates the onset of hypothermia by altering the body’s normal circulation rate. Water has excellent heat-absorbing capacity, and for that reason, wet clothing greatly accelerates the heat loss from the body core.

Mild hypothermia can be prevented by simply putting on additional clothing to stay warm. In more severe cases, however, additional measures are necessary, and if you are the victim, you may not immediately recognize the symptoms. Seek medical attention for moderate or severe hypothermia. The first thing to do when hypothermia is suspected or even a

possibility is to stop the heat loss. If wet, remove wet clothing and get into dry ones and add extra layers if possible. If outdoors, get into shelter that will protect against wind and rain such as a car or tent. If you have to keep moving, put on clothing that will offer some protection from the elements. In moderate and severe hypothermia, rewarming the body is necessary. Warm the center of the body—chest, groin, neck, and head—first. To rewarm the victim, have the person lay under dry blanket, clothing, sheets, a sleeping bag or any dry insulating material. A second person lying next to the victim may be needed to provide additional heat. Avoid rewarming the extremities first, especially in extreme cases, as cardiac arrest may result. If the victim is conscious, giving warm beverages helps, as long it contains no alcohol or caffeine. Keep the person warm and insulated until help arrives.

The good news is that the body is potentially more resilient to the cold than the data suggest. While the survival rate in cases where the body's core temperature has fallen below 70 degrees Fahrenheit is minute, people have survived with a core temperature as low as 59 degrees. In places like Alaska and Canada, rescue workers always act according to the following rule: "A body is not dead until it is warm and dead."

Sources:

<http://emergency.cdc.gov/disasters/winter/staysafe/hypothermia.asp>

<http://timberlinetrails.net/ClimbingHypothermia.html>

http://www.forbes.com/2008/12/19/hypothermia-public-health-biz-healthcare-cx_wp_1219colddeaths_slide_6.html?thisSpeed=30000

The Joys and Tribulations (Deer Me!) of the 2014 Richmond Rock Swap

By Dave Lines

Photographs by Laurence O'Callaghan

Every year on the second Saturday in November the Richmond Gem and Mineral Society holds a gathering of rock hounds called the "Richmond Rock Swap". It is really a rock and mineral show with a small town, family oriented flavor. Held in the social hall of a Baptist church in the suburbs, vendors are limited to two tables inside or as many as they can fit into a double parking space outside in the parking lot. People really do swap rocks there and sometimes the negotiation for a single specimen goes on all day --- but most folks simply swap dollars for the rocks.

Typically, the vendors arrive at daylight --- about 6 AM --- and setup their displays --- after which they spend a few minutes looking at everyone else's stuff before the public is admitted at 9 AM. Customers range in expertise from beginning beginners to crusty veterans with 50 plus years of rock knowledge. Each vendor is encouraged to provide free specimens (no junk!) for the kids and they love it. The kids come through with bags or buckets like plastic "trick or treat" pumpkins which they fill with rocks. One guy brings a full size pickup truck every year with the bed of the truck covered with give-away rocks and the kids clean him out.

For me, this event is a bit like a reunion as I get to see many good friends with whom I spend time retelling rock stories and catching up. It is really fun. Swapping is also fun as there is so much neat stuff --- especially local material from the Eastern U.S. --- and some of it is from closed but classic locations like the Rutherford Mine in Amelia, Virginia. I spotted a huge chunk of cleavelandite (at least 25 pounds) from the Rutherford and I offered \$100, but the lady wanted \$200 --- so I called my son Jeff in California and got his advice. He told me to pass as it had a good bit of damage on the surface. I liked it

as it had a lot of interlaced crystal pattern and I checked it out several times during the day. The lady even sent me a piece of her homemade cake at lunch time (maybe to soften me up so I would meet her price?).

Another guy stopped at our table and pulled a huge 4-1/2 inch megalodon shark's tooth out of his pocket and asked me to make him an offer. I offered \$120 (it had been entirely coated with clear finger nail polish --- very bad --- and there were 7 small chips on the serrations --- otherwise it was near perfect). It had been found by his father at Westmoreland State Park in the 1960's. The guy left and returned about an hour later --- said he had turned down an offer of \$450. Good for him --- but he should have taken the \$450 as the meg market is currently saturated due to dive finds off the North Carolina coast.

A NC dealer friend wanted to swap for about \$30 worth of my specimens --- ok --- but I had seen him pick a \$30 piece of Arizona turquoise earlier from another dealer, so I asked if he would swap that. Well --- maybe. The deal with the other dealer had not been completed --- so I waited until about 2:30 PM, when they finished their deal --- but the NC dealer decided to keep the turquoise. So-o-o I swapped for a flat of North Carolina blue kyanite crystals --- dirty, but cleanable. (They are soaking in a solution of Iron Out as I write this.)

During the day, I saw an unusual specimen from Rockville, Maryland's Hunting Hill Quarry (a closed location) on a Richmond club member's table. It was a very attractive upright specimen of olive green clinozoisite crystals partially covered with one inch long "hairs" of actinolite crystals. She wanted \$50. I dithered all afternoon and finally as she was packing up, I bought it from her. Several other folks did the same with me and bought items late in the day. They (as I had) had seen specimens earlier and thought about them throughout the day until they finally decided to buy.

All in all, I basically broke even --- sold about \$200 worth of rocks, purchased about \$100, even swapped another \$70 worth --- and spent about \$30 for gas and bridge toll and \$40 for the two tables. I had an enjoyable day --- but this is not the end of the story.

You see, I had invited fellow club member Larry O'C to go with me as he had in years past. Larry had planned to meet me at my house in La Plata at 6 AM and we would ride and enjoy the swap together. Well, Larry showed up an hour early on Saturday morning --- with a long face --- unusual as Larry always has a smile. Poor guy had hit a deer on US Route 301 in La Plata. His truck's grill was destroyed, the hood was dinged where the antlers had hit, one headlight was out, one parking light was dangling and I could see damage to the radiator. Thankfully, Larry was not injured. I called the State Trooper duty person at the La Plata barracks to report it (for insurance purposes) and when he asked where the truck was, I responded "at my house with deer fur sticking out the front bumper". When he stopped laughing, he said they had already dragged the deer off the road and he already seemed to know all about it and even knew that Larry had been driving an older Chevrolet --- yup, a 1996 Silverado. Guess he had seen it on the traffic light intersection camera where the deer had jumped in front of Larry.

To his great credit, Larry went to the swap with me, put on his happy face and helped me greatly during the day by manning our tables and giving free rocks to the kids. In his words (in an email he sent to me): "All in all, yesterday was a good day. Thanks for the invitation. I really enjoyed the day (well, 95% of it anyway!). Attached are the pictures I took: beginning with the setting up and ending with closing down, with jawing, dickering, and outside setups in between."

You can help by giving some sympathy and morale support to Larry. Thanks.

Photos of the Richmond Rock Swap:



Ammolite

Timothy Foard

This past August my friend Nick went on a hiking trip to Alberta. One of the things on his to-do list was to obtain some Canadian ammolite in the rough, not to cut into jewelry, but as specimens. He succeeded, and I asked him to bring them the next time we meet. The following month, during the Atlantic Coast Gem, Mineral & Jewelry Show, at the Howard Co. Fairgrounds, I saw him, and later that day we went out to his car and he showed me the ammolite he purchased (below photos).



The name ammolite is the trade name (introduced in 1967) for the iridescent shell material from only a very few species of ammonites, which are extinct cephalopods related to octopus and squids. It is one

of the few gems of organic origin, which includes amber and pearls. It was first described formally in 1909, but it has not received much attention until the 60's and was recognized as gem status in 1981. Specifically, the Canadian material comes from either *Placentoceras meeki* or *Placentoceras inteercalare*, from the upper Cretaceous Bear Paw Formation (70-75 million years ago or Ma), which occurs in the southwestern part of the country, extending as far south as Montana, USA. Both are large species, reaching about 3 feet in shell diameter. Ammolite has been known for centuries by the native peoples (the Blackfoot tribe) of the region and used as a talisman.

Chemically, ammolite is aragonite, which is identical in composition to calcite (CaCO_3), but crystallizes in the orthorhombic system instead of hexagonal as calcite. It is a soft mineral—hardness 3.5-4 with a specific gravity of 2.6-2.9. It has a vitreous luster and takes a bright polish.

Ammolite is not restricted to Canada; it has been found in Madagascar, and to a lesser extent, Utah. The Malagasy species are either *Cleoniceras cleon* or *Cleoniceras beseiei*, much smaller (usually 1-3, up to 6 inches in diameter) species occurring in the early Cretaceous (100-113Ma) from the Mahajanga province. At least 90% of the gem quality material comes from Canada. The geological environment favor the occurrence of ammolite: the aragonite is deeply buried in the bentonite sediment which prevented the conversion of aragonite into calcite. The Canadian material display the widest color range and is of the best quality. Ammolite from other areas such as Madagascar tend to display relatively subdued colors, often with interruptions when viewed at different angles or the shell material too thin, and the color ranges are usually restricted to reds or oranges.



Typical ammolite from Madagascar (Geology.com)

When taken out of the ground, ammolite is rarely durable by itself to be cut as a gem. These are the best material for lapidary, but the vast majority of times the aragonite layer is so thin and easily subjected to damage (the so-called dragon skin or stained glass appearance) that it has to be strengthened and protected before use in jewelry. The company which mines most of the ammolite, Korite International, has developed ways of preparing the raw material for durability. The backing may be the base rock, which can be shale or siderite (FeCO_3) and the top is capped with spinel (MgAl_2O_4), giving it a hardness of 8. The material is often cut in free form to obtain the maximum amount of carat weights. Like other gemstones, there is a grading system, although it is not a universal one. The grading system used by Korite International range from AA, (exquisite), which is the best grade, to A+ (extra fine); A- (fine); A (Standard or good); B (fair) and finally C (commercial), which is of the lowest quality.



Jewelry made from Canadian ammolite (Korite International)

The Canadian ammolite seldom leave the country in rough form—an application for export must be approved by the federal government, and thus it does not show up regularly in gem and mineral shows in the US, although the finished product and ammonite specimens can be purchased online. It is the official gemstone of Alberta and considered a national treasure. They command high prices because of their rarity and the amount of labor required for extracting and preparation. The mines where ammolite is quarried are relatively small in area and in some places the material are buried too deep to extract profitably. Malagasy ammolite, on the other hand, are much less expensive and are quite common in US markets.

Sources:

<http://www.korite.com/ammolite.html>

<http://geology.com/stories/13/ammolite/>

http://www.madagascandirect.com/acatalog/Iridescent_Ammonite_ref_3403_Fossil_Madagascar.html

<http://www.theglobeandmail.com/news/british-columbia/gemstone-worth-500000-stolen-in-vancouver/article16089557/>

Allegheny Aggregates

Jim White



Did anybody get the tag number of that continent?

On Tuesday Nov. 11th at 9:00 AM I met members of the Montgomery County Rock club at the Allegheny Aggregates Bedrock Quarry in Flintstone MD. The

unusual timing of this trip was due to the fact that this quarry does not allow weekend trips.

The Bedrock Quarry is in the Tonoloway Limestone formation, the same rock that many of you are familiar with from trips to the National Limestone Quarry in Mt. Pleasant Mills PA.

We met at the scale house and got a safety briefing and a little background on the company and the history of the quarry and the uses of its products. Much of the material goes for road building and construction. Some is used for traction on icy winter roads and some is used by coal-fired power generating plants, who grind it into a fine powder and add it into the furnace where the Calcium carbonate combines with water vapor and Sulfur fumes and neutralizes the acids which they form. After this it was off to the pit.

The day started out a little cool, but quite pleasant for the season and soon it warmed up to the point we could shed our coats and do our “hounding” in shirt sleeves. I found some small pieces of Fluorite within minutes. A member of the Montgomery club soon found what all agreed was the best Fluorite any had seen come from Maryland, a chunk of rock larger than a softball with several purple, cubic crystals of Fluorite that were about 5/8” on a side. I don’t know about this particular specimen, but the ones I found didn’t fluoresce.

Fluorite finds however were somewhat scarce, all in all. We spent most of the rest of the day looking for Calcite crystals which weren’t especially plentiful either. I was disappointed to not find any of the quality that is often seen at National Limestone. On the plus side, some fluoresced nicely (white or pale orange, depending on whether they were under short or long wave UV) and continued to glow well even after the UV source was removed.

By mid-afternoon we had pretty well exhausted the possibilities in the area in which we were allowed to search (most of the quarry was off-limits, they were

working that day and so we were restricted to a small part), so we called it a day and headed home.

Member’s Finds

Photo of collection of rainbow rocks—specimens of kyanite covered with iridescent hematite—from Willis Mountain, Virginia Collected by Richard Simcsak.



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**

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