

Southern Maryland Rock and Mineral Club



ROCK TALK



JULY 2021

GAME ON!!!!

27 July 2021 at 1900

Meeting at OLD WALDORF SCHOOL

(next to the Waldorf JayCees Hall)

North of the RT 301 / RT 5 Intersection

Hello Southern Maryland Rock and Mineral Club members ---

It has been a long time in coming, but we are finally going to have our first Rock Club meeting since February 2020 --- It will be on July 27, 2021 at our NEW LOCATION --- 3074 Crain Highway, Waldorf, MD 20601 at the old Waldorf Elementary School building right on US Rt 301 next to the Jaycees Hall (Charles County Junior Chamber of Commerce). This location remains very central to our membership.

Background:

This move is the result of several months of intense effort by our club officers (Sondra, Joe, Carole, Cheryl, Bob, Rich and Dave). Basically, our negotiations with Juan Rodriquez, the new Director of the Nature Center who took over on March 8, 2021, were unsuccessful.

<u>As a result</u>, our club officers unanimously approved the following:

- (1) Sever our relationship with the Nature Center and send them an email explaining why. (Completed.)
- (2) Sign a one year rental contract with the Friends of the Old Waldorf School, Inc.

(FOWS) for use of their meeting room on the 4th Tuesday each month (Dec, Jan and Feb excluded due their poor heating system). (Completed.)

- (3) Set our club dues at \$25/individual and \$35/family (up to 2 adults with all kids under 18 free) which should cover our expenses like meeting room rent and EFMLS dues/insurance. (Completed and posted on our website.)
- (4) Start planning for an annual Rock and Mineral Show at the Old Waldorf School in their sizeable auditorium. This location is centrally located near the middle of Waldorf directly on busy U.S. Rt 301 and would get great visibility for a Rock Show event. (to be discussed at upcoming meetings.)

Now

Members need to pay dues [\$25/individual and \$35/family (up to 2 adults with all kids under 18 free)] to Dave Lines (our club Treasurer) by check to "David Lines, Treasurer, SMRMC" and mail to Dave Lines, 7970 Bel Alton Newtown Road, La Plata, MD 20646). Please include with your check a completed copy of the new <u>Membership Application Form</u> that you can download from our club website at <u>www.SMRMC.org</u>. Also in this issue of ROCK

TALK. Your information is needed to reach you with Club Newsletters and Field Trip Information and will not be shared with anyone. Dave will acknowledge receipt of your dues and info by email. You may also pay by cash or check at our first meeting on July 27th from 7:00 to 9:00 pm. Questions may be submitted to the club website on the form provided.

Please join us

Our first meeting on July 27th is at the Old Waldorf School. I think you will like our new venue. In addition to a business meeting, snacks and catching up with each other, the "program" for our meeting is a "Beer Flat Social". Everyone can bring and tell about one flat of selected rocks, minerals, fossils, &/or lapidary items collected since our last meeting in March of 2020. Each person will get a few minutes to explain what she/he brought to share with us.

The attached pictures showing our new meeting location are as follows:

<u>Front of school ---</u> which faces south --- office is on left and room where we would meet is on the right.



Auditorium

Looking toward the stage. Size is 40' by 72' plus raised stage of 40' by 28'. Nice space. Restrooms are on far end on either side.



Meeting room

We will use this room for our meetings. There is an outside entrance door from the front of the building. The space is big enough--- 22-1/2' by 28-1/2'. Carpet floor. Black boards.



We all want to get back to having more fun again with our rocks. Hope to see you soon.

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2020 / 2021 PROGRAMS/REFRESHMENTS SCHEDULE			
MONTH	PROGRAM	REFRESHMENTS	
JULY	"Beer Flat Social"	TBA	
AUGUST	Traditional Club Auction Month	TBA	
SEPTEMBER	ТВА	TBA	
OCTOBER	ТВА	TBA	
NOVEMBER	Elections / TBA	TBA	
DECEMBER	Holiday Party	Pot Luck	

PROGRAMS

Programs, like field trips, serve an essential part of our club. They provide an opportunity for members to share and learn from others the many facets (pun intended) of rocks, fossils, geology, and minerals.

Think about how you can contribute to a future meeting. We love to learn. Hope to see you all soon. Carole

No minutes for the May or June 2021 meeting BUT, the August ROCK TALK "should" have July's meeting minutes!!

Unfortunately "No News does not mean "Good News" in this situation.

MINUTES



SOUTHERN MARYLAND ROCK AND MINERAL CLUB

(Please print legibly. Thank you.)

APPLICATION FOR MEMBERS	HIP	Date:	
Name:			
Street:		Apt/Unit #:	
City:	_ State:	Zip Code:	
Cell Phone:	Needed for communication during Field Trips		
E-Mail:	Club Newsletter and Trip Notifications are distributed by email		
Applying for: ☐ Individual Adult Membership : (over 18) (\$25.00/yr) ☐ Family Membership: (\$35.00/yr)			
Family is defined as one address. Maximum 2 adults living in same home and children under 18 years of age residing at same address.			
(For Family Membership Only) Name:adult Name:adult #2 - Cell Phone:			
I do hereby waive all rights to hold The Southern Maryland Rock and Mineral Club, and its Officers liable for any personal injury or loss sustained by me or any member of my family while participating in club activities. I also agree to adhere to the rules and regulations of The Southern Maryland Rock and Mineral Club, as set forth by its bylaws.			
Signature of Applicant:		Date:	
Make your check payable to "David Lines". (Do not write anything else on that line) On the Memo Line write "SMRMC" (and nothing else)			
Please pay at a meeting or the mail check and Application form to: David Lines 7970 Bel Alton Newtown Road, La Plata, MD 20646			

Calendar of Events

Many events have been postponed/cancelled and/or rescheduled due to the COVID-19 pandemic.

Please check with the sponsoring club to make sure the event has not been cancelled due to the ongoing COVID-19 pandemic before attending any event.

October 30, 2021 ULTRAVIOLATION SHOW

Where: First United Methodist Church, 840

Trenton Rd, Fairless Hills, PA When: 9:00 AM to 4:00 PM

What: ULTRAVIOLATION is the ULTIMATE annual show for the fluorescent mineral enthusiast, whether a novice or serious collector. The show features many of the world's premier fluorescent mineral COLLECTORS AND DEALERS who strive each year to bring the biggest, brightest and best fluorescent minerals to satisfy the insatiable cravings of the fluorescent collector. ULTRAVIOLATION highlights fluorescent minerals exclusively and is the next best thing to night collecting. Free admission and a fluorescent mineral specimen for each junior mineralogist 12 years and younger when accompanied by an adult.

Admission: \$2.00 Donation, Children 12 &

Under Free

Dealers: 8' TABLE \$30 – ½ TABLE \$15 ADVANCED REGISTRATION FOR DEALERS IS

ADVISED

SEND YOUR CHECK MADE PAYABLE TO: Lee McIlvaine, 8510 Elliston Dr. Wyndmoor, PA 19038 Or PAYPAL electronic payment to leemcilvaine@yahoo.com

For information call Lee McIlvaine at 215-713-8020 or email uvgeologist@yahoo.com

Registration Open for the 2021 Wildacres Fall Session

(September 6 – 11/12, 2021) https://efmls.org/wildacres/

REQUIREMENTS UPON CHECK-IN (Know before you go):

Proof of Covid-19 Vaccination

- CDC issued COVID-19 Vaccination Record Card
- 2. Vaccine Passport

Policy Receipt Acknowledgment

Signed EFMLS Policy Receipt Acknowledgement Form of the Wildacres Commitment to Care.

Go <u>here</u> to review the Commitment to Care document (please check frequently before arriving. Last updated 6.14.21) Click here to download the EFMLS Policy Receipt Acknowledgement Form.

To expedite your arrival, please email a copy of proof of vaccination and your EFMLS Policy Receipt Acknowledgement Form to Wildacres2021@EFMLS.org.

For more information on the 2021 Wildacres Fall Session (Registration Form, Class Schedule & Speaker Info) email the address above and for any questions. Or call the Acting Chair of the Wildacres Working Group, Steve Weinberger at (410) 833-7926.

You can get a full refund if you cancel at least 30 days prior to the session.

Wildacres Retreat - School of Instruction

The EFMLS sponsors two workshop sessions each year in a cool mountain-top setting near Little Switzerland in North Carolina. Offered at the sessions are seminars in various facets of the earth sciences.

Indulge your passion for minerals, gems, jewelry, and craft. Join entry and intermediate level short classes. Enjoy programs from our great Speakers-in-Residence. Form new friendships and deepen old ones.

Do it all at Wildacres a beautiful retreat center atop the Blue Ridge Mountains.
What could be better!

Some additional stories that you can link to!!

These are just a few links to other stories related to what our Club members have shown interest in over the years (At least what I remember before COVID!).

Unexplained cache of prehistoric SHARK TEETH is discovered at a 2,900-year-old site in the City of David - 50 miles from where these fossils would be expected to be found

https://www.dailymail.co.uk/sciencetech/article-9756491/Prehistoric-shark-teeth-2-900-year-old-site-City-David.html

Huge meteorite struck Ukraine and formed the a 15-mile-wide Boltysh impact crater 650,000 years AFTER the dinosaur-killing asteroid - and did not play a part in their demise, new study suggests

https://www.dailymail.co.uk/sciencetech/article-9701521/Huge-meteorite-did-not-playdemise-dinosaurs-study-says.html

Ancient diamonds reveal that Earth was primed for life's 'explosion' at least 2.7 BILLION years ago

https://www.dailymail.co.uk/sciencetech/article-9757705/Geology-Ancient-diamonds-reveal-Earth-ready-lifes-explosion-2-7-BILLION-yearsago.html

Fossil treasure trove is discovered in China: Archaeologists find 17 entirely new species in undersea 'nursery' that was buried by huge mudslide 518 million years ago

https://www.dailymail.co.uk/sciencetech/article-9758171/Archaeologists-17-entirely-new-species-undersea-nursery-buried-518-million-years-ago.html

Terrifying dinosaur the size of a BUS with razorsharp claws 'like a Swiss Army knife' roamed Spain 130 million years ago, analysis of jaw fossil reveals https://www.dailymail.co.uk/sciencetech/article-9765211/Dinosaur-razor-sharp-claws-like-Swiss-Army-knife-roamed-Spain-130-million-years-ago.html

Half dinosaur, half bird! Tiny extinct bird that lived in China 120 million years ago had a skull similar to a T.REX

https://www.dailymail.co.uk/sciencetech/article-9720379/Tiny-extinct-bird-China-skull-similar-T-REX.html

Winchcombe meteorite is now official!
'Extremely rare' space rock 'worth £100,000'
that crashed to Earth on a driveway in the
Cotswolds has its classification formally
accepted

https://www.dailymail.co.uk/sciencetech/article-9772285/Winchcombe-meteorite-classification-formally-accepted.html

Congratulations to the new Leaders of the EFMLS! The following individuals took office on 7/10/21.

Leadership serving the Eastern Federation **2021 – 2022**

President, Eric Hoffman

1st Vice President, Sara Furbush

2nd Vice President, Nancy Campbell

Treasurer, Elizabeth Triano

Assistant Treasurer – Open until filled

Secretary, Karenne Snow

<u>Past President Advisory Council Chair</u> (<u>PPAC</u>), <u>Larry Heath</u>

The Matryoshka diamond: Unique gem with ANOTHER jewel trapped inside is discovered in Russia - and it may be over 800 MILLION years old

By SHIVALI BEST FOR MAILONLINE

PUBLISHED: 06:28 EDT, 12 July

2021 | UPDATED: 08:42 EDT, 12 July 2021

https://www.dailymail.co.uk/sciencetech/article-9779867/Unique-diamond-gem-trapped-inside-discovered-Russia.html

Gem dubbed the Matryoshka thanks to its resemblance to the Matryoshka dolls The outer diamond only weighs 0.62 carats, and the inner diamond 0.02 carats

Experts suggest that the internal diamond grew first, and the external one was formed during subsequent stages of growth

An unusual diamond with another diamond trapped inside has been discovered in **Russia**, and may be over 800 million years old. The diamond has the dubbed the Matryoshka diamond, thanks to its resemblance to the traditional Russian Matryoshka dolls - a set of wooden dolls of decreasing size placed one inside another.



Experts have been studying the unusual diamond using several methods, including infrared spectroscopy and X-ray microtomography

Experts are still unclear on how the strange gem formed, but believe this is the first of its kind in the history of global diamond mining.

Oleg Kovalchuk, Deputy Director for innovations at ALROSA's Research and Development Geological Enterprise, said: 'As far as we know, there were no such diamonds in the history of global diamond mining yet.

'This is really a unique creation of nature, especially since nature does not like emptiness. Usually, some minerals are replaced by others without cavity formation.'

It remains unclear how much the unusual diamond could be worth.

The diamond was mined in Yakutia at the Nyurba mining and processing division of ALROSA.

While it has a highly complex structure, the outer diamond only weighs 0.62 carats (0.124 grams), and has dimensions of just 4.8 x $4.9 \times 2.8 \text{ mm}$ (0.18 x 0.19 x 0.11 inches).

Meanwhile, its internal cavity volume is just six cubic millimetres, and the internal crystal volume is just 1.6 cubic millimetres, with an estimated weight of 0.02 carats (0.004 grams). The inner diamond has a tabular shape, and has dimensions of $1.9 \times 2.1 \times 0.6$ mm (0.07 x 0.08 x 0.02 inches).

It was discovered by specialists of the Yakutsk Diamond Trade Enterprise during a sorting process, but has now been handed over to Research and Development Geological Enterprise of ALROSA.

Experts have been studying the unusual diamond using several methods, including infrared spectroscopy and X-ray microtomography.

Based on their analysis, the researchers suggest that the internal diamond grew first, and the external one was formed during subsequent stages of growth.

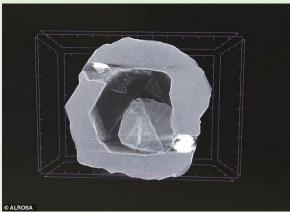
Mr Kovalchuk explained: 'The most interesting thing for us was to find out how the air space between the inner and outer diamonds was formed.

'We have two main hypotheses.

'According to the first version, a mantle mineral captured a diamond during its growth, and later it was dissolved in the Earth's surface.

'According to the second version, a layer of porous polycrystalline diamond substance was formed inside the diamond because of ultra-fast growth, and more aggressive mantle processes subsequently dissolved it.

'Due to the presence of the dissolved zone, one diamond began to move freely inside another on the principle of matryoshka nesting doll.'



Experts have been studying the unusual diamond using several methods, including infrared spectroscopy and X-ray microtomography

HOW DO SCIENTISTS 'GROW' DIAMONDS IN A LABORATORY?

Diamonds fetch their lofty price tags because they form over millions of years under high pressures and temperatures deep within the Earth's crust.

But a number of companies are now growing the gems in laboratories across the world, threatening to shake up the diamond industry.

A small 'seed' diamond acts as a scaffolding for the process.

Scientists first place this seed into a vacuum chamber to remove impurities from the air.



Lab-made gems are threatening to upset the diamond industry, with several companies worldwide now growing the stones for jewellery. In this image Pure Grown Diamonds CEO Lisa Bissell unveils a lab-cultivated diamond in New York in 2015

They then funnel hydrogen and methane gas heat to 3,000°C (5,400°F) into the chamber to create a highly charged gas known as plasma.

The gases rapidly break apart, releasing carbon atoms from the methane that collected on the diamond 'seed'.

These atoms naturally copy the crystal structure of organic diamond, which is also made up of carbon atoms.

Each artificial stone grows at a rate of around 0.0002 inches (0.006mm) an hour.





The Southern Maryland Rock and Mineral Club

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

Held at the OLD WALDORF SCHOOL

Next to the Waldorf JayCees Hall

3074 Crain Highway, Waldorf, MD 20601

North of the RT 301 / RT 5 intersection

We're on the web: SMRMC.ORG

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ITEMS WANTED/FOR SALE

Cheryl Reese

David Lines

For Sale – Virginia Unakite slabs (approx ¼ inch thick) – \$0.50 per square inch (this is half off regular price). Call Dave (240) 427-7062

