

Southern Maryland Rock and Mineral Club



Rock Talk



September, 2019

**Next Meeting:
September 24, 2019 @ 7:00 PM**

Program
Mineral Collecting in Morocco
Bob Farrar
Refreshments
Sondra Fielder

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

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AUGUST MINUTES

Submitted by Cheryl Reese

DATE: Dave gave a blessing at 6:45 and we all shared a potluck dinner. A short meeting was called to order at 7:10 by Joe

VISITORS/NEW MEMBERS:

There was one visitor present.

MEMBERSHIP: No report.

NEWSLETTER: No report.

TREASURER: Dave explained that 10% of each transaction at the auction tonight would go to the treasury. He also showed a thank you letter we got from AFMLS for the scholarship donation we gave in memoriam for Carolyn Weinberger.

FIELD TRIPS:

There was one trip in August that was combined with the Richmond club to the Silica mine.

Sept 28, 2019 Willis mountain in Dillwyn, Virginia for kyanite. Sign up sheet passed around, if you are interested in going contact Dave Lines.

PROGRAMS: No report

WEBMASTER: No report

OLD BUSINESS: No old business.

NEW BUSINESS: Christmas party will be held at Dave and Anne Lines beautiful

farm house on December 15th from 3-6 p.m. Bring a dish to share please and a rock related gift for the gift exchange. Price \$10-15 limit. This is always a very fun and entertaining evening .

ADJOURNED: Adjourned at 7:15 pm followed by auction. There were some very nice specimens available. Proceeds to the treasury was \$94.00.

UPCOMING SHOWS AND EVENTS 2019

September 28-29, 2019 - West Friendship, MD - 55th Annual Atlantic Coast Gem MINERAL JEWELRY & FOSSIL SHOW sponsored by **THE GEM CUTTERS GUILD OF BALTIMORE.** Saturday, Sept. 28th 10 am - 6 pm & Sunday, Sept. 29th 10 am - 5 pm. at the Howard County Fairgrounds / West Friendship, MD.

October 11-13, 2019 - Baltimore, MD - 63rd Annual Paul Desautels Micromount Symposium sponsored by the Baltimore Mineral Society. Located at the Friends School of Baltimore, 5114 North Charles Street, Baltimore, MD 21210. Giveaway Tables, Silent Auction, Voice Auction, Mineral Talks, Trading, Lots of Friends. Hall of Fame inductions: Anne Cook, Cleveland and Jesse Cope Green (18171920). For program registration forms email Mike Seeds at <mseeds@fandm.edu

October 19-20, 2019 - So. Charleston, WV - 47th annual Kanawha Rock & Gem Club show and sale. So. Charleston Community Center; 601 Jefferson Road, So. Charleston, WV; Sat 10-6, Sun 10-5

October 26, 2019 - Fairless Hills, PA - The Rock and Mineral Club of Lower Bucks County, PA and the North East Region Fluoresophiles (NERFs) of the Fluorescent Mineral Society and its collecting wing the UV Nomads present "ULTRAVIOLATION 2019" at the First United Methodist Church, 840 Trenton Road, Fairless Hills, PA. (See flyer, page 23).

Letter from Dr. Lance Kearns (JMU):

Hello Mineral Enthusiasts;

I am writing to let your mineral club members know that the James Madison University Mineral Museum (the one located in Memorial Hall) will be closed permanently beginning July 1, 2019. We are presently in the process of constructing a new and bigger Mineral Museum which will be located in the Festival Center on the JMU campus. We expect this new facility will open in the Spring of 2020. Your club will receive notification when the new museum is to open, and an invitation to join us for the Grand Opening.

For now, I am asking you to spread the word (by mouth and newsletter) that the JMU Mineral Museum will be closed permanently beginning July 1, 2019.

Best wishes,

Dr. Lance E. Kearns
Professor Emeritus
Mineral Curator

ITEMS WANTED/FOR SALE

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.

For Sale – SMRMC Only 4 remaining t-shirts for sale: size small (1) at \$9.00; and large (3), also at \$9.00 each Contact Tina @ htleague@comcast.net

Rocks, Minerals, and Fossils in the News

3D PRINTERS TRANSFORM CLASSROOMS WITH FAUX FOSSILS AND OTHER TACTILE LEARNING AIDS Written by Mae Rice

<https://builtin.com/hardware/3d-printing-in-education>

3D printers are opening up more engaging avenues for learning in the classroom.

Once upon a time, the ocean teemed with enormous sharks far bigger than the dinky one in *Jaws* — ten times the size of a T-Rex, by one estimate.

Scientists call these long-extinct creatures “megalodons,” a name that rightly translates to “big tooth.” Of all the megalodon’s impressively enormous features, the mouth-area stands out. Its jaws applied enough pressure to crush a car. Its mouth opened wide enough to swallow a train.

Scientists know all of that primarily from the megalodon's fossilized teeth, some of which are more than seven inches long. Once you start looking for them, they crop up frequently. They've been unearthed everywhere except Antarctica, and they're for sale on eBay (not that we recommend purchasing them there).

You can also find them in various K-12 classrooms, menacingly bared in floor-to-ceiling jaws.



The school ones aren't really fossils, though — they're 3D-printed replicas, created under the auspices of [iDigFossils](#). This National Science Foundation-funded initiative — a collaboration between the University of Florida and the Florida Museum of Natural History — aims to integrate 3D printing into American K-12 curricula.

As part of the program, scanners and 3D printers were purchased for classrooms in roughly 15 schools, teachers were trained to print fossil replicas to use in their lessons. The megalodon fossils are typically a hit, iDigFossils project manager Claudia Grant

said, because the ancient shark is “such a charismatic animal.”

It also plays a key role in the iDigFossils project's origin story.

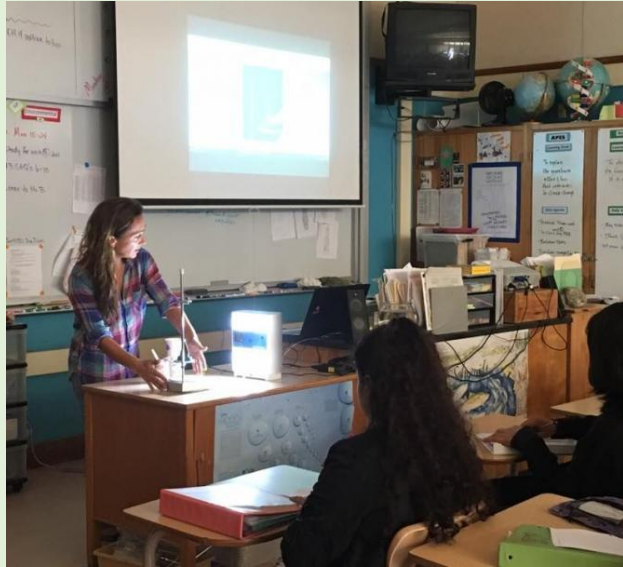
Years ago, when Grant worked in the paleontology area of the Florida Museum of Natural History, she had a walk-and-talk meeting with her supervisor. (Walk-and-talks are not just for *West Wing*!) They strolled past an exhibit dedicated to Florida fossils, which had “this massive, spectacular Megalodon jaw” at its entrance.

“Wouldn't it be fun to 3D scan these teeth and have students [print them out in class and] build the jaws?” Grant said offhandedly to her supervisor.

“He opened his eyes and looked at me, and he's like, ‘That is totally possible,’” she recalled.

He was right, but it wasn't easy. Megalodon teeth are a dime a dozen (well, not literally — they go for around \$250 per tooth), but the museum's teeth all came from the same megalodon. A full set like that is quite rare, Grant said. Since kids weren't permitted to handle such valuable fossils, and taking 3D scans of them required a huge MRI machine-like scanner that the University of Florida didn't have, Grant and her supervisor reached out to Duke University for a loaner. A team of museum researchers then applied for and received a grant from the NSF's ITEST program. It was generous, too — more than a million dollars.

By 2016, iDigFossils was a funded reality.



Claudia Grant

The team used its funding to outfit schools with Next Engine 3D scanners and Lulzbot printers, which look a bit like sewing machines and can print virtually anything using non-toxic plastic. Grant said she and her colleagues selected those particular brands not only because they were affordable, but also because their high-resolution capabilities allow students to upload scans to scientific databases used by professionals — “almost like citizen science.”

Mostly, though, students and teachers download and print fossil scans for class activities. Printed megalodon teeth are used in lessons about shark evolution. They also prove useful for hybrid science and math exercises in which students extrapolate the shark’s size from the size of its teeth alone. Students assemble entire megalodon jaws as well — just as Grant imagined.

“They tend to forget that they’re in the science class because they’re so excited,” she said.

Teachers report spikes in student engagement when printed fossils are incorporated in the curriculum — and not just shark teeth. One teacher 3D-printed turkey skeletons from various eras for a Thanksgiving season lesson on turkey evolution. In another class, Grant said, they’re reconstructing the body of a giant extinct snake. To that end, she helped them 3D-print 250 vertebrae.

For yet another lesson, teachers can print massively magnified fossils of foraminifera, microscopic plankton from the ocean floor that contain historical information about the water. That makes them “really important fossils for learning about ocean, ocean circulation, temperatures and of course climate change,” Grant said.

Turning fossils into classroom props is just one of the ways 3D printing is impacting education. The technology is useful in all kinds of lessons that allow students to learn by seeing and making, instead of merely listening. That’s a huge boon to those with tactile and visual learning styles who struggle in lecture classes. Grant counts herself among that group.

“I really love this project because I come from an artistic background,” she said. “I am a visual learner.”

We’ve rounded up a handful of other enterprises that meld 3D printing with education.

HERKIMER DIAMOND MINES HOST GIRL SCOUT JAMBOREE

Posted By: Tom Geise

<https://www.wktv.com/content/news/Herkimer-Diamond-Mines-host-Girl-Scout-Jamboree-561014491.html>

During the geology filled weekend, the girls will learn about such things as gemology, paleontology, and hydrology.

HERKIMER, NY – Girl Scouts from all over New York are making their way to the Herkimer Diamond Mines KOA Resort for a Girl Scout Jamboree.

During the geology filled weekend, the girls will learn about such things as gemology, paleontology, and hydrology.



The scouts will also have a chance to do some mining of their own and have the opportunity to create jewelry out of the materials they find.

Troop leader Leesa Israel says the girls are learning about more than just rocks and minerals.

“It’s a great bonding experience for the girls. They’re meeting other girls from all over the state. They’re learning to discover new things and how to be independent.”

OFFICIAL COMBINED MINERAL COLLECTING FIELDTRIP**THE GEM AND MINERAL SOCIETY OF LYNCHBURG, VA INC. (HOST)****An official Fieldtrip of the Southern Maryland Rock and Mineral Club****KYANITE MINING CORP., DILLWYN, VA. – ANNUAL FIELDTRIP****WILLIS MOUNTAIN KYANITE MINE****Saturday, September 28, 2019****9:00 AM to 1:00 PM**

Sign-up is required, Please email me or sign-up at the meeting. If you cancel, notify me to be taken off the list as space may be limited due to the expanded list of clubs now participating in this annual event.

Note: Please sign up early because I must forward a list of attendees to the Lynchburg VA club by 9-19-19. There is a limit of 150 collectors from all clubs.

SAFETY: Everyone must arrive at the office parking lot *no later than 8:30AM* to sign the release form and hear the required safety briefing. *Each Club field trip leader, and/or their appointed representatives, will act as safety observers while in the mine and will be expected to be on the lookout for and correct all safety infractions from any collector from any club.* Keep in mind that this site is one of the very few that are still open for collecting. Not obeying all the safety rules will cause this site to be closed to all future collecting. *If you have any medical condition that would put you in any danger, do not attempt this trip. For your own safety, let your field trip leader or collecting buddy know if you have any medical condition that could be a problem for you.* Be prepared for windy, hot or wet weather. Also bring drinking water and stay hydrated.

DRIVING FROM Southern Maryland: Mine office physical address: 10830 James Madison Hwy., Dillwyn, VA. Or Follow I-95 south to I-295 west toward Charlottesville to I-64 to VA Rt 288 south to US Rt 60 west. Continue on US 60 (West) to Sprouses Corner. Turn left on US 15 South and drive 4 miles to Willis Mt. Plant Road. Turn left and stop at the stone mine office building on the right. Park out of the way as not to block traffic. Please do not park along Rt. 15. Allow 4 hours driving time from Southern Maryland to the mine office.

ASSEMBLY TIME: Meet at the mine office for signing the waiver and for safety instruction --- plan to be there by 8:00 a.m. --- *no later than 8:30am.* (Note – last year we had a family who almost missed this trip because they arrived too late for the safety briefing. --- Don't be late.) Please wait in the parking lot and do not block traffic. Commercial trucks may be using the road. While you're waiting, be sure to enjoy the beautiful blue kyanite boulder in the front yard from the old closed Baker Mountain. Barricades will block us from driving in restricted areas. Access to all plant operation areas is prohibited.

COLLECTING: Willis Mountain is a “monadnock”. The kyanite exposure resisted weathering and, as the surrounding area was eroded and weathered away, the mountain outcrop was left standing. This is very much like the famous Graves Mountain kyanite mine in Georgia. The center of the mountain has been mostly mined away. We should be able to find plenty of white kyanite blades in the massive kyanite quartzite; pyrite; quartz; hematite; iridescent hematite; red mica, green mica, apatite and possibly some

blue kyanite and pale green trolleite. Some of the white kyanite and quartz here have a beautiful light blue fluorescence and the apatite is yellow so bring your short wave lamp and blackout cloth.

SAFETY Clothing Required: Each person must WEAR a Hard Hat with a mfg. date of 5 years or less [no bicycle helmets], safety glasses, steel toed boots [ONLY STEEL OR MSHA (Federal Mine Safety and Health Act) APPROVED REINFORCED FIBERGLASS TOED BOOTS WILL BE ALLOWED; No low quarters or sneakers even if they have steel or composite toes], gloves, long pants. If you do not have all the required safety equipment, you will not be allowed to enter the quarry.

Additional Safety Requirement: Wheel Chocks --- each time you park your vehicle in the mine, please set your parking brake and chock your wheels using wheel chocks (purchased, homemade or use a rock).

Recommended Collecting tools: Geologist pick, small chisels, 3 or 4 pound crack hammer, old newspaper to wrap specimens, buckets. Optional: sledge hammer, 6 foot pry bar, larger chisels. We can drive into the designated collecting area, so hand trucks are not needed. Please bring a camera and take some pictures of the mine and our collecting for our newsletter and website. The view from the mine (on a mountain top) is awesome.

AFTER THE DIG SOCIAL: The pavilion beside the mine office will be available immediately after the dig ends at 1PM to relax, cool off eat your lunch. This will also be a social get together so that we can have a chance to become better acquainted with the members of our rock club neighbors and to provide some time to relax before their long ride home. You might want to bring your own lawn chair. There may also be other groups there as invited guests of Kyanite Mining. There might be a brief program on the mine and a lab tour.

AGE LIMIT: Minimum age limit is 8 years old. All children must be signed for, closely supervised by an adult and never left un-attended. They must also wear all the required safety equipment. No Exceptions.

PETS: No pets allowed, this is an active working quarry.

WEATHER: The trip may be canceled for safety concerns in case of hard rain or a thunderstorm or hurricane. Call to confirm if there is any question.

Sign up --- at our August meeting or by email to dave.lines@earthlink.net. Please include your cell phone number in case I have to reach you.

CONTACT: Dave Lines , cell 240-427-7062, Field Trip Chairman for the Southern Maryland Club, email: dave.lines@earthlink.net

ULTRAVIOLATION Show

Where: First United Methodist Church, 840 Trenton Rd, Fairless Hills, PA

When: October 26, 2019, from 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

2019 ANNUAL WORLD CHAMPIONSHIP QUARTZ CRYSTAL DIG OCTOBER 11 - 12,
2019 OFFICIAL REGISTRATION FORM

One Contestant Per Form, Please Print Clearly

Contestants may not dig or visit participating mines on or after Wednesday 10/9/19 prior to the event.

Name: _____ Age _____

Home Phone: _____ Cell Phone _____

Email Address: _____

Mailing Address : _____

City: _____ State: _____ Zip _____

____ I am a member of a rock, gem, and mineral club and wish to enter the club division of behalf of:

Club Name & Address: _____

____ I would prefer a vegetarian meal at the awards banquet.

This is an AMATEUR quartz crystal digging competition. Profession and commercial quartz crystal diggers and dealers are not permitted to compete in the World Championship Quartz Crystal Dig. The Montgomery County Area Chamber of Commerce asks for your understanding and honesty in maintaining this as an amateur event. Any entrant in violation of this rule will be disqualified, their entrance fee forfeited, and barred from future events.

____ I HEREBY CERTIFY THAT I AM AN AMATEUR QUARTZ CRYSTAL DIGGER.

____ I fully understand participating in the World Championship Crystal Dig (the dig) is physically strenuous. I am in good health and do not have a history of health problem that may be aggravated by my participation in the dig. I hereby waive and release all contestants, sponsors, official, and volunteers from any and all claims incurred in connection with or aggravated by my participation in the dig.

THE MOUNT IDA AREA CHAMBER OF COMMERCE RESERVES THE RIGHT TO
DECLINE ANY APPLICATION FOR ANY REASON

____ I AGREE TO COMPLY WITH ALL RULES OF THE DIG

_____ (SIGNATURE)

_____ I am the parent/legal guardian of a participating Young Miner.

Parent /Legal Guardian Name (Please Print) Signature

Make checks for entry fee and additional t-shirt(s) payable to:

Mount Ida Area Chamber of Commerce PO Box 6 Mount Ida, AR 71957

Questions? Call 870-867-2723

PLEASE MAKE A COPY FOR YOUR RECORDS OF ALL PAGES AND RETURN ORIGINALS

2019 ANNUAL WORLD CHAMPIONSHIP QUARTZ CRYSTAL DIG OCTOBER 11 - 12,
2019 OFFICIAL REGISTRATION FORM

Welcome to the 2019 Annual World Championship Quartz Crystal Dg in Mount Ida, AR, the Quartz Crystal Capital of the World. This year's two-day dig is scheduled for Friday and Saturday, October 11 - 12th. All amateur quartz crystal diggers are invited to enter.

ENTRY FEE

The dig entry fee is \$115. Register early and save! Early bird discount is 25% off when registered by August 31, 2019. No refunds will be issued after October 1, 2018. Same day registration is \$125 if space is available. Please note: Only 100 diggers may register for this year's event.

DIVISIONS

ADULT: Open to diggers 18 years of age or older. Awards presented in two categories, points and clusters. **YOUNG MINERS:** Open to diggers 17 and younger. Awards presented in one category, points and clusters combined. **CLUB:** Diggers may also team up with fellow rock, gem, and mineral club members to compete for bragging rights and a chance to win a free entry to next year's dig. Be sure to list your club name on the entry form!

AWARDS AND PRIZES

A total of \$2250 in prize money is awarded in three categories: Points, clusters, and young miners. 1st - 3rd place winners in each category receive a quartz crystal adorned award plaque. 1st - 5th place winners are awarded cash prizes as follows: 1st \$250, 2nd \$200, 3rd \$150, 4th \$100, 5th \$50 Awards and prizes are presented during the Awards Celebration on Saturday evening. Each digger receives on complimentary meal ticket to the banquet. Additional meal tickets may be purchased for \$15 each at the start of the banquet. If you prefer a vegetarian meal please so indicate on your entry form.

PARTICIPATING MINES

Twin Creek Crystal Mine(Upper and Lower Mines) <http://dixiecrystalcompany.com>

SCHEDULE

On Friday, October 11th, 7am, meet at the Montgomery County Fairgrounds (248 Fairgrounds Rd., Mount Ida, AR 71957) for orientation mine passes, and number assignment. Coffee and donuts provided. All diggers must check in at the fairgrounds before proceeding to the mines!

Digging begins at 8am and ends at 3pm. Diggers must check in, present their mine pass, and sign a liability waiver at their chosen mine each day. Diggers may not switch mines midday but may choose a different mine each day. Diggers may not leave the mine and return again after the same day. **ONCE YOU LEAVE THE MINE YOU ARE DONE DIGGING FOR THE DAY.** Plan ahead and bring plenty of water and snacks. Do not leave behind trash at the mines! If you see trash please pick up.

Diggers may enter the best point and best cluster they dug on each day for judging by a panel of experienced quartz crystal industry professionals. Diggers must submit their entries, in the numbered bags provided, to the Dig Master at the mine. Crystals for judging must be entered on the same day they were dug.

Judging takes place at the fairgrounds when the Dig Masters deliver the crystals to the Crystal Handlers. Digger may observe judging. Individual scores are posted after tabulation of the judges' scores by the Scoring Committee. Awards are based on two-day cumulative points. Be sure to enter one point and one cluster each day.

Saturday, October 12th, 7:30am, meet at the fairgrounds for mine passes, dig announcements, and door prize drawings before proceeding to the mines. Digging begins at 8am and ends at 3pm. Individual scores are posted upon tabulation of the judges' scores. Awards celebration begins at 6pm, awards presentation at 7pm. Crystals submissions may be recovered from the stage afterward, around 8m.

CAMPING

A limited number of RV spaces and Tent camping spaces are available at the Montgomery County fairgrounds provided by the MC fair board: \$20 per night with electricity, \$10 per night without electricity. Spaces are assigned on first come, first served basis with prepayment required for reservations. If you wish to camp at the fairgrounds please indicate the number of days. ____ I wish to reserve a camping space for ____ days for an RV or Tent (circle choice) with or without electricity (circle choice). Please contact the Chamber to check availability, 870-867-2723 or director@mtidachamber.com.

ADDITIONAL EVENT T-SHIRTS

Each Digger will receive one Event T-Shirt with application. Preorder and save! Additional event Tshirts may be preordered for \$15 each. Please include payment for your t-shirts with your registration. A limited number of event shirts will be available for purchase at the event for \$20 each. Please pre-order to assure you get a shirt in your size.

I wish to pre-order event t-shirt(s) in the following sizes

Size S M L XL 2XL 3XL

**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:

