

# Southern Maryland Rock and Mineral Club



## Rock Talk



**April, 2017**

**Next Meeting:  
April 25, 2017@7:00 PM**

**Program: 2016 California Trip**

**Dave Lines**

**Refreshments:**

Tim Smith

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

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## MARCH MEETING MINUTES

Submitted by David Lines

**DATE:** Meeting was called to order on March 28 2017 at 7:05 pm by Jim White, Acting President

**VISITORS:** None

**TREASURER:** Dave reported same balance as last month.

**MEMBERSHIP:** --- Polly, Field Trip Vice President. 41 members paid to date. 13 Members present tonight. Email from Cheryl thanking club for sending her a card. Monty is not doing well.

**PRESIDENT'S REPORT** --- Cheryl Reese currently under a lot of stress due to difficult caregiving for Monty who had bad fall in addition to his ongoing battle with cancer. We all signed an encouragement card to Cheryl and will mail it tonight.

**FIELD TRIPS:** Dave, Field Trip Vice President Recent past trips\_--- busy month 3-11-17 --- Purse State Park --- fossils – (joint trip with Delaware Mineral Society) --- 9 participants. 3-18-17 --- Odessa DE --- petrified wood with side trip to C&D Canall spoils piles for belemnites (joint trip with Calvert Marine Museum --- several other clubs invited.) 4 participants from our club – all found wood. Plus 2 found belemnites from C&D Canal spoils piles. 3-25-17 --- Chestnut Ridge, Bath County, VA --- quartz crystals. 6 participants, all found xls. Upcoming trips ---- 5 in April and 2 (so far) in May 4-15-17 --- Phoenixville, PA ---- pyromorphite (joint trip with Delaware Mineral Society). 4-18-17 --- Gettysburg Quarry, Gettysburg, PA with Montgomery County (Tuesday trip --- please

note.) Calcite and pyrite --- several required Waivers to sign. 4-21-17 --- Medford Quarry, central MD, calcite dogtooth xls with Montgomery County Club -- 1 waiver to sign for Mont. County Club (Friday trip --- please note.). 4-29-17 --- Avondale Quarry in Avondale, PA (Joint Trip with Delaware Mineral Society for pegmatite materials – large almandine garnets/schorl tourmaline. 4-29/30-17 ---- Franklin NJ ---“Super Dig” – fluorescent minerals – (on you own trip) and Sterling Hill at Ogdenburg, NJ \*\*\* (Need to take copy of March Newsletter showing that this is an “Official Trip” --- must sign up online --- 225 person limit.) 5-6/7-17 – Primitive Technology Weekend at Willow Grove Nature Center at Willow Grove entrance to Cromwell Valley Park (Baltimore County) – call 410-887-2503 for further info. (This is a “go on your own” trip.) May – Herkimer NY --- Herkimer diamonds ---approx. start TBD on 5-15-17 (Monday) – Please contact Trip Leader = Joe Davis if interested

**PROGRAMS:** --- Carole, Programs Vice President --- Tonight: DVD from 2016 Dallas Symposium “Smoky Hawk Mine, Crystal Peak, Colorado, by Joe Dorris”. April meeting program --- “2016 California Trip” by Dave. May -- program needed. Snacks tonight by Paul and Linda. April snacks to be by Tim Smith

**WEBMASTER:** Bob, Webmaster --- up-to-date. 800 hits in past 2 weeks.

**NEWSLETTER:** Tim – newsletter was out in time for tonight’s meeting. Very long edition – 23 pages. Correction to March RockTalk: “Comments from the Acting President” were not by Dave Lines --- that was part of an email dealing with fields trips – it was written by Dave Fryauff of Montgomery County Club

**MINUTES:** We forgot to accept/approve the February minutes.

**OLD BUSINESS:** --- Rock Swap\_--- Dave, Swap Chairman --- June 17 from 9 – 5 at Gilbert Run Park in Charles County, MD Largest\_pavilion\_reserved\_--- Dave paid \$300.00 of his own for pavilion rental fee and paid them another \$50.00 check of his own for the deposit fee. Plenty of room in parking lot for 100 swappers – each can have 10’ x 10’ behind their vehicle to set up 3 tables and 10 x 10 tent. Large covered pavilion with 37 large aluminum picnic tables --- 2 electric outlets for micro phone for auction Extras include horse shoe pits, cornhole blocks, volley ball court on sand with net, playground with swings for kids 200 Swap Fliers copied and mailed to Delaware Mineral Society for distribution at their show on March 4 - 5 (at Dave’s expense). Nature Center made 100 swap Fliers\_--- Dave mailed to Montgomery County Club\_for distribution at their show on March 18-19 (at Dave’s expense). Swap Announcements sent to *Rock and Gem* magazine, *Rocks and Minerals* magazine and to the EFMLS Calendar --- swap already shows up on Google. Volunteer list to help at swap\_-- sign-up sheet passed around at tonight’s Meeting. (\*\*Note – Bob will be unable to be auction recorder due previous engagement) Sign up list Currently is as follows: A. Paul and Linda - collect specimens from each swapper for auction; B. Ralph G. – Auctioneer; C. Joe and Bill C. to bring 3 coolers – 7 more still needed; D. Joe - 10 bags of ice; E. Tim S. Buy sodas/water for 100 people; F. Carole and Al – plastic ware/cups/plates for 100; G. Polly volunteered to help where ever needed --- THANKS to all who signed up to help --- WE STILL Need a few more volunteers to: A. Make/install 3 “EFMLS” signs; B. Auctioneer Helper; C. Auctioneer recorder; D. Bring 7 more large coolers; E. 2 people to answer questions and direct swappers where to park; F. Set up and remove “Treasure Box” and sign for. All planning for swap --- must be completed *by April Meeting* due to Dave will be absent at May meeting (attending Wildacres). Nametags – Tim Smith said he was ready

to send in an order – please contact him if you would like to order a nametag.

**NEW BUSINESS:** Member “Bob Jewett” died in early March --- Dave recommended we send a \$50.00 donation to the AFMS Scholarship Foundation in his memory. We have always done so in the past for our deceased members. Motion made, seconded and passed. Question from Jim W. --- “How will Dave be reimbursed for all of his expenditures for the June 17<sup>th</sup> Rock Swap?” Dave explained that the EFMLS Region IV Vice President, Sara Beth Phillips, has formally requested that the EFMLS pay the \$300 pavilion rental fee. No word yet whether EFMLS has decided yet. As a back-up plan, the auction of donated specimens from the swappers following the Potluck Picnic will hopefully raise a substantial amount of money to cover expenses of all the volunteers to reimburse them for sodas, bottled water, plasticware, plates, cups, ice, etc.. Motion by Polly, and later seconded, to reimburse Dave from the Club Treasury if EFMLS donation and auction did not raise enough to cover all his expenses. Motion passed. Update: “Rock Sale/Show” in parking lot at Gary’s store location to be planned for month of October. Gary confirmed by cell phone (on speaker phone) that he will finalize plans later this year. Door Prize Drawings --- Jim Britton (all the way from West Virginia) generously donated tonight’s door prizes – lots of prehnite specimens from Centerville Quarry in Centerville, VA from the 1960’s plus many fossils including a 2” mako shark tooth and a 2” meg shark tooth – both excellent specimens, and several fossil whale and porpoise vertebrae and a fossil inner ear bone for a whale. Thank you Jim. After 3 full rounds of selections, the left over remaining prehnite was donated to the Lapidary Club. Anyone wishing to donate door prizes to give away, please bring them to a meeting of your choice.

**ADJOURNED:** Meeting was adjourned at 7:54 pm.

**Upcoming Shows and Events: 2017**

**April 29-30:** 45th Annual New Jersey Earth Science Association Gem & Mineral Show sponsored by the New Jersey Earth Science Association. Franklin School, 50 Washington Ave; Franklin, NJ

**May 13 –28<sup>th</sup>** Annual Chesapeake Gem & Mineral Show, 10 AM – 4 PM Ruhl Armory - Towson, MD

**May 13—** Annual Earth Science Show & Sale sponsored by the Rock & Mineral Club of Lower Bucks Co. PA. Christ United Methodist Church, 501 Wistar Rd; Fairless Hills, PA.

**May 13:** 28<sup>th</sup> Annual Chesapeake Gem & Mineral Show hosted by the Chesapeake Gem & Mineral Society. Ruhl Armory, I-695 at exit 26 south, Towson, MD.

**May 13-14:** Annual "Fossil Fest" sponsored by the Finger Lakes Gem, Mineral & Fossil Show. Greater Canandaigua Civic Center, 250 No. Bloomfield Rd; Canandaigua, NY.

**May 20-21:** 49th Annual "World of Gems and Minerals" Rock, Mineral, Fossil and Jewelry Show sponsored by the Berks Mineralogical Society. Leesport Farmers Market, Leesport, PA.

**SMRMC OFFICERS****PRESIDENT**

(position open)

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## Rocks, Minerals, and Fossils in the News

### Sabre-toothed tigers in ice-age Los Angeles had bad back trouble

<https://www.newscientist.com/article/2127141-sabre-toothed-tigers-in-ice-age-los-angeles-had-bad-back-trouble/>



Looks the part – though a bad back may slow progress

Daniel Eskridge/Stocktrek Images/Getty

By Jeff Hecht

The big sabre-toothed cats that roamed Los Angeles 12,000 years ago had bad backs and shoulders, it seems.

Meanwhile, the other apex predator that shared its southern California habitat, the dire wolf, was more likely to suffer from headaches and leg pain.

The discoveries come from an analysis of thousands of bones from skeletons of these extinct creatures, with the injuries probably sustained as a result of their dining habits.

Like other cats, the sabre-toothed *Smilodon fatalis* ambushed its prey and wrestled them into submission. Modern big cats suffocate their prey, by either biting down on the

victim's snout to clamp it shut or squeezing its throat to crush its trachea so it can't breathe.

*Smilodon* was more heavily built, and is thought to have used its massive forelimbs to pin down large prey such as bison, horses and camels. It could then quickly kill the animal by ripping out its throat with its long curved canine teeth.

Injuries are inevitable in such battles to the death, and are known in modern cats as well as fossils. But no one had looked at enough bones to tell how often they occurred either in the past or present.

Most modern museums lack the room to store more than a few complete skeletons from any species, but the Natural History Museum of Los Angeles County has a hoard of fossils dug from the famed La Brea tar pits near the city.

Blaire Van Valkenburgh, a palaeontologist working on large predatory mammals at the University of California, Los Angeles, mentioned that local resource to her graduate students, and two were eager to investigate.

Caitlin Brown found a way to map damaged areas on bones, and she and Mairin Balisi spent six months examining more than 35,000 bones from sabre-toothed tigers and the other apex predator that shared its southern California habitat, the dire wolf.

#### Sore backs, shoulders and necks

The researchers found injuries on 4.3 per cent of all tiger bones and 2.8 per cent of all wolf bones.

The big cats were most likely to injure shoulder and back bones, probably when struggling with big prey. Likewise, injuries to the wolves' ankles, wrists, and upper necks fit with their dining habits, says Van Valkenburgh.



“Dire wolves hunted in packs, which were essentially a running set of jaws,” she says. “They can’t turn their paws inward to wrestle; they have to do everything with their mouths. So we expected to see injuries where they were kicked in the head, and maybe injuries in the limbs, either by being kicked or by tripping while in hot pursuit.”

“This is really, really interesting,” says Margaret Lewis, a palaeo-predator researcher at Stockton University in Galloway, New Jersey. Researchers had suspected that *Smilodon* ambushed its prey, but had not studied what bones were damaged or how common injuries were. “This is the first real evidence from the animals themselves.”

**Journal reference:** *Nature Ecology & Evolution*

## Geology ABC — How to identify granites

<http://www.zmescience.com/science/geology/how-to-identify-granites/>

MIHALANDREI



*They often look like this... but don't take that for granite! (I just had to do the pun, sorry)*

Granites are some of the most distinguishable rocks out there, and even amateur geologists usually have no problem in identifying them. But if you're new to the rocky world of geology, identifying any rock can

be a daunting task. Fret not, we've got you covered. Here's what you need to know.

## How granites form

Granites are igneous rocks, sometimes also called plutonic. This means that they're not formed as a result of a volcanic eruption, but rather through the slow, gradual cooling of magma. They tend to have pretty big, coarse crystals (visible with the naked eye) — as a rule of thumb, the bigger the crystals, the slower the cooling. For instance, in other eruptive rocks which cooled extremely fast, you can't see crystals with the naked eye, or there aren't any crystals at all — because they've had no time to form. But with granites, named for their granular structure, you don't have this problem — you just see the crystals with relative ease. No equipment is needed, though a loupe can help sometimes.



*This granite is pink-reddish due to the alkali feldspar. Don't let color be the only factor you look at. Here, the feldspar is pink-reddish, the mafic minerals are black, and the quartz is grey. Image credits: Khruner / Wiki Commons.*

Since granites are a pretty diverse group, their chemistry can also be varied. They contain, above all, silicon dioxide, which can make up to 70% of their composition. They also contain alumina, (around the 14% mark), and to a lesser extent, sodium oxide, potassium oxide and iron oxide. Other chemical compounds typically account for less than 1%.

## Minerals in a granite

Granites usually contain both “felsic” and “mafic” minerals. Those names might not mean much if you’re just interested in IDing simple rocks, but it helps to remember them for your geological forays, especially if you want to identify more rocks.



*As pretty a granite as you'll ever find. Try to spot the different minerals. First, mentally divide the mafic from the felsic. Don't bother too much with the mafic, just know that it's there. Then, try to separate the quartz from the feldspar. Can you do it? Image credits: James St. John.*

Basically, felsic minerals are white(ish) white mafic minerals are dark. A tool I used to use as a student is that “mafic” sounds a lot like “mafia,” which is bad, so it’s black. Felsic sounds a bit like “fair” (I know it doesn’t but whatever — it helps), so they’re a bit whiter.

Overall, granite is a felsic rock, with mafic minerals being secondary or accessory in nature. The two main minerals in a granite are quartz and feldspar — in an extreme case, you could have a granite comprising of just those two minerals, though that almost never happens.

So, the first two (quartz and feldspar) are felsic, they’re the white ones, while the other ones (generally amphiboles, pyroxenes, biotite) are black or very dark. You can also have accessory minerals such as tourmaline, beryl, topaz, zircons and apatite, but that really doesn’t help you with the

identification. Let’s look at the minerals that do help you:

### Quartz

Quartz is a very common mineral in the Earth’s crust and is almost always well represented in granites. According to the generally accepted definition, a granite must have at least 20% quartz.

Quartz is typically light-grey and kind of looks like an opaque window. If you look at the crystals closely, they should stand out from the surrounding rocks. Quartz is pretty sturdy and you can’t scratch it with your fingernail (unlike other minerals).

### Feldspar

Feldspar is often the most abundant rock in a granite — this is why the rock looks white with dark spots, and not dark with white spots. There are two main types of feldspar: alkaline and plagioclase, with most feldspars being a mixture of the two. It doesn’t really help you to tell the two apart (unless you want to go much deeper into the mineralogy of granites), and in most cases, you can’t. However, identifying feldspar is key for identifying a granite.

Feldspar pops up pretty much everywhere in geology, in igneous to sedimentary rocks. It makes out some 40% of the Earth’s crust, and knowing how to recognize it is key for any geologist — amateur or professional. Feldspars are hard minerals, almost always white (sometimes with a pink hue), typically sporting a glassy luster. A big difference between feldspar and quartz, for example, is how it breaks. While quartz breaks irregularly, often in curvy shapes, breaks readily along flat faces, a property called cleavage. Feldspar tends to look quite blocky as a result, as opposed to other minerals whose individual crystals might stand out.

### Amphiboles and pyroxenes

We’re taking these two as a group because of their many similarities. They’re both black, and if you could look at them closely, they look like prisms rising up. The main visual difference is that

amphiboles are generally taller than pyroxenes, though this distinction is extremely hard to make for a non-specialist.

Chemically, amphiboles contain water while pyroxenes don't but again, this doesn't really concern basic identification. Look for black prisms which are a bit tall, not flat like...

### **Biotite**

Biotite is black mica. Amateur geologists often have a rough time distinguishing between biotite and other black minerals, but there are a few things which can help you. First of all, biotite is basically a series of planar sheets, unlike amphiboles and pyroxenes which are prisms. So biotite is flat, the others are tall. Because of its sheet-like structure, it often starts to split up at the ends, much like an old book (can be hard to see with a naked eye). Biotite is also easily scratched with a fingernail, that can be a good tell. Granites can also feature white mica (called muscovite), though that is much rarer than biotite

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## **What makes a granite a granite**

Overall, it's not any one of these minerals that make a granite a granite, but rather the way they all fit together. The main takeaway is to look at:

- the structure and texture. After all, granite is named for its “granular” or phaneritic texture — you can see
- types of minerals: look for quartz (at least 20%) and feldspar, often with mafic minerals



*A granite with large crystals. Can you see the difference between the quartz and the feldspar? Image credits: James St. John.*

Granites are some of the easiest rocks to identify, and it's all a matter of training your eyes and mind, it shouldn't take too long. Also, if you're just starting, you might read in some places that many rocks look like granites, but aren't really granites — they're called granitoids. For now, you shouldn't really bother with that and go with the ‘if it looks like a granite, it's a granite’ approach.

So, now that you know how to recognize them...

## **Where to find granites**

Granites are widely distributed across the continental crust. You can't find them “everywhere”, but you can find them pretty much close to everywhere. There is no global distribution or map of granites, the best thing to do is simply Google “Granites near [location]” or contact your local geology museum or national survey organization (USGS or BGS, for



instance). Still, there are some general pointers which might help.

Granite often occurs as relatively small, less than 100 km<sup>2</sup> stock masses. They're often associated with mountain ranges, and remember they have no connection to volcanic eruptions. Granites can vary significantly in crystal size and weathering so don't expect them all to look like stock photos.

The most important thing is to go exploring and make your own notes, and then compare them with the literature. Send us your photos and notes, and we'll be sure to feature them!



## See the World's Largest Collection of Fluorescent Rocks

And get glowing in this mine's Rainbow Tunnel  
By **Jennifer Billock**

In a New Jersey mine spanning 2,670 vertical feet—more than twice as deep as the Empire State Building is tall—visitors might notice a little glow. Well, a lot of glow, actually. The Sterling Hill Mining Museum is known to have the world's largest publicly displayed collection of fluorescent rocks—ones that beam bright neon colors under certain types of light. The museum is an old zinc mine—one of the oldest in the country, having opened in 1739 and in

operation until 1986, during which time it was an important site for hauling out zinc, as well as iron and manganese. The abandoned mine was purchased in 1989 and converted to a museum in 1990, and now welcomes about 40,000 people every year. The museum itself includes both outdoor and indoor mining exhibits, rock and fossil discovery centers, an observatory, an underground mine tour, and the Thomas S. Warren Museum of Fluorescence devoted to the glowing minerals.

The fluorescence museum occupies the mine's old mill, a structure dating to 1916. There's about 1,800 square feet of space, with more than two dozen exhibits—some of which you can touch and experience on your own. Even the entrance is impressive; more than 100 huge fluorescent mineral specimens cover an entire wall that's lit up by different types of ultraviolet light, displaying the glowing capabilities of each mineral type. For kids, there's a "cave," complete with a fluorescent volcano, a castle, and some glowing wildlife. And there's an exhibit comprised solely of fluorescent rocks and minerals from Greenland. All told, more than 700 objects are on display in the museum.

About 15 percent of minerals fluoresce under blacklight, and they generally don't glow in the daytime. Essentially, ultraviolet light shining on these minerals is absorbed into the rock, where it reacts with chemicals in the material, and excites the electrons in the mineral, thus emitting that energy as an outwardly glow. Different types of ultraviolet light—longwave and shortwave—can produce different colors from the same rock, and based on other materials inside the mineral or cutting through a rock (called activators), it may glow multiple colors.

"A mineral might pick up different activators depending on where it forms, so a specimen from Mexico might fluoresce a different color than one from Arizona, even though it's the same mineral,"

Jill Pasteris, a professor of earth and planetary sciences at Washington University, told the college's newspaper. "On the other hand, some minerals are just good fluorescers. Calcite, for example, can glow in just about all the fluorescent colors. But, oddly enough, having too much of an activator can prevent fluorescence as well. So an overdose of a generalized activator like manganese can keep a good fluorescer like calcite from lighting up."

Among the most impressive parts of the mine tour at Sterling Hill is the walk through the Rainbow Tunnel, which ends in an entire fluoresced room called the Rainbow Room. Much of the route is illuminated by ultraviolet light, causing a burst of glowing, neon reds and greens from the exposed zinc ore in the walls. The green color signifies a different type of zinc ore called willemite. The mineral's color can vary wildly in the daylight—everything from the typical chunks of reddish-brown to crystallized and gem-like blues and greens—but it fluoresces bright neon green. When the mine was active, the ore covered the walls throughout, so anyone shining ultraviolet light would have had a similar experience to what occurs in the tunnel today.

## Chestnut Ridge Trip Report

Article and photos by Dave Lines



"Perfect weather" --- two words that best described this trip. It was already 59 degrees at 4 am in La Plata and stayed that warm on the entire 178 mile drive to the Shenandoah Valley. From the Burger King where we met in Staunton to the farm where we had permission to park at the foot of Chestnut Ridge, the temperature "dropped" to 51 degrees. And during the rest of the day --- despite an overcast sky -- the temperature rose to the mid 70's. Incredible for late March!

We arrived about 9:15 am at the farmhouse and I held a safety brief. I also reminded folks (six of us -- John B., Ralph B., Joe, Wendy, Leo and myself) what to expect on the hike to the top. 3 of us had been here before -- and 3 were first timers. Lots of enthusiasm -- everyone was looking forward to finding some crystals -- especially after our 6 year hiatus. I told them to start the climb while I first visited the neighbor because I would catch up later. At least that was my intent.



That all changed when I visited the next door neighbor with whom I had called previously to let him know our plans. The short version is that I talked another 30 minutes with him and his visiting son (from Florida), so it was 9:45 a.m. when I started up the mountain to mark the trail with surveyor tape for everyone to follow. In reality, everyone was so far ahead that my marking a trail was a bit irrelevant except for the trip back down the mountain. About ¼ of the way up, I heard someone pounding on a rock -- it was Ralph and he said that was he was going to stay there. About the same time, I passed Leo. Continuing up, I passed all the familiar landmarks and about 100 yards from the top, I could hear voices. But when I finally reached the top about 11:00 a.m. (I am not as fast as I used to be), no one was in sight. Not a soul. I whistled and “yahooed” -- no replies. So I started looking around.

The area had not been visited for several years --- lots of fallen leaves and old limbs covered the ground --- and the crystals. I found one area where someone had dug a large hole about 2 feet deep. There was a pile of dirt and rocks next to it and some quartz crystals showing. I picked up a few and moved over several feet to the left where I scraped away the surface leaves and started digging gently with my rock hammer. Almost immediately, I began finding

small clusters and single crystals which I set aside. About then, I heard Leo below me talking to someone. It turned out to be Wendy who was about 150 yards from the top on a very steep slope --- she said she was finding a few, but I recommended she keep coming up the mountain to the top where it was easier.

Leo had followed the marked trail and soon was up near me. I suggested he try a nearby “stump hole” (when a large tree falls with its rootball attached, the hole that is left is a “stump hole”). He dug in that hole for the rest of the day --- with good success. A few minutes later, John showed up and I pointed out the crystals that were on the dirt/rock pile next to me. He was elated and, within a few minutes, showed me a nice 3” cluster which he declared was “the biggest crystals he had ever found”. He was a very happy first timer to this fine old mountain!

About then, I remembered a homemade steel pick/mattock that I had previously hidden up near the top, so I started looking for it --- I could not find it, but I did find an old sifting screen with a rotten wooden frame. The ½” mesh screen was still okay, so I knocked off the rotten wood, folded up the sides of the wire hardware cloth and made quite an acceptable sifter. I returned to my spot and started sifting the dirt as I removed it from the hole with a garden trowel. I put the singles in a plastic bag and, after removing the red dirt with a stiff brush to determine the quality of the crystals, I set the clusters aside.

Another few minutes later, we welcomed Wendy who was “bright red” and sweaty. (This mountain will do that to just about everyone!) After looking around, she picked a spot about 20 feet to my right and started finding crystals as soon as she pushed aside the leaves. Another happy rockhound. And, after brushing the dirt off some of the “larger rocks” that she was finding, she discovered several nice crystal clusters that she had missed. She was thrilled. Around noon, Joe showed up. He had been looking for an outcrop which he remembered from a previous



trip. According to Joe, the outcrop had been laced with cracks and crevices filled with crystals and he had been thinking about it for years since. But he could not locate it. He was a bit frustrated and tired since he had wasted 2 hours searching --- all the while carrying an 8 pound hammer that he had planned to use. When I showed him my bag of crystals, he snapped out of it, got a screen out of his backpack and started sifting for crystals about 15 feet to my left. He hit pay dirt immediately. In short order, Joe had a good pile of singles. Unfortunately, during his enthusiasm, his foot nudged his bucket over and it began rolling downhill – slowly at first, then picking up speed. It was a little sickening to watch, but also – I admit --- somewhat humorous. That bucket rolled and tumbled furiously down the mountain at least 100 yards scattering its contents the entire way. Poor Joe! But I must give credit to him -- he did not get upset or mad --- and he went all the way down that steep dropoff, retrieved his bucket and returned to the top picking up every scrap of paper and stuff that was scattered along the way. My hat is off to him!

Joe went back to sifting for crystals and persuaded John, who had been testing several spots without much success, to come over between Joe and me to sift. In this new location, John found a lot of nice crystals including some double terminated ones and some nice small clusters.

Eventually, Ralph arrived. He said he had found some very good crystals down below where I had seen him. He had broken them out of a large boulder. He said they were good quality crystals with sharp clean points. He talked with us for a few minutes, then walked off looking for another area. About 2 p.m. he returned and Joe decided to go back down the mountain with him. The rest of us kept digging until about 3 p.m. when we stopped to high grade our finds, wrap our clusters and pack them for the trip back down to the cars. We also spent a good deal of time filling in our holes and covering the area over with leaves and old tree branches to protect the

soil from erosion. In the process, we found a few old plastic soda bottles and took them back with us. Our group did a great job, because when we left, you could hardly tell where we had been digging.

We four left the top about 4 p.m. and removed our surveyor tape as we descended. John was the speediest of our group and he went down and returned to help the rest of us. Wow – that was super! Joe and Ralph were still pounding on rocks when we reached them. Ralph joined us and said he had had enough and that his legs felt like “noodles”. This mountain will do that!



Near the bottom, John came back a third time and took my bucket of specimens, while I diverted across the hillside to the neighbor's house to thank them again. We (Joe, too) all rejoined about 5:30 p.m. at the vehicles where the air temperature (according to my vehicle) was still 71 degrees. Three of us (Leo, Wendy and me) decided we would attend the Ruritan “All-You-Can-Eat Spaghetti Dinner” that we had seen advertised to be held at the Community Center in Deerfield on our way home. John decided to start his drive back, while Joe returned to pick up his heavy bucket of rocks. Joe and Ralph said they planned to drive directly home.





During our return to Deerfield, I stopped our caravan on the paved road --- there was no shoulder --- (with the truck flashers on for safety) and proceeded to wash my face and hands to remove some of the dirt and grime with some cold, clean spring water which was coming out of a hose held up by an old wooden post right beside the road in front of an old house. In the country, that is a hospitable way to help travelers like us. Spring water has been flowing out of that hose ever since I can remember --- at least for the last 20 years that I have been going to Chestnut Ridge.

By the way, the spaghetti dinner was great. I never ate beyond the first plate full because I made the mistake of telling the fellow serving that I was hungry. He heaped up my plate about 3 inches deep! Then we had cake for desert. What a meal!

It was another enjoyable trip and everyone stayed safe. See you next time.

### Member's Finds

Additional specimens of quartz crystal cluster collected at Chestnut Ridge, Virginia.



Photo by Ralph Boswell



Photo by Wendy Nikolich

Collected any interesting specimens? Send a photo or two to the editor at [bmorebugman@yahoo.com](mailto:bmorebugman@yahoo.com) for inclusion in the next issue of Rock Talk.

**AN OFFICIAL SMRMC FIELD TRIP**

**Subj: An Official Trip of the Southern Maryland Rock and Mineral Club(\*) --- Field Trip to Sterling Hill Super Dig, Ogdensburg, New Jersey on Saturday, April 29-30, 2017**

**Meeting Time** --- 9:00 a.m. at the registration booth on Saturday, April 29, 2017.

**Club Membership** --- attendees must be a paid up member of a AFMS Club that carries insurance.

*You must have your membership card with you at the registration booth.*

**Trip Leader** --- None---this is a come on your own trip

**Locations** --- Sterling Hill Mine, Ogdensburg, NJ and Franklin School, Franklin, NJ.

**Directions to Sterling Hill:** see google maps driving directions.

**Safety** --- The location will require signing a waiver. Common sense says to wear gloves, **eye protection is necessary**, wear sturdy shoes/boots and long pants, use sunscreen and stay hydrated. Stay alert.

**What to Collect** ---Fluorescent minerals at the dig. Everything under the sun at the show.

**SEE WEBSITE:** *Sterling Hill Super Dig*. All of the information is there in great detail. You must pre-register on the website: [uvworld.org](http://uvworld.org).

**Recommended Equipment** --- UV lamp (you can rent them there if you do not have one), black blanket or cloth if you want to cover up rocks during the day in the field to examine them) sturdy shoes/boots (no sneakers or sandals), work gloves, **safety glasses are a must, hard hat is required**, rock hammer, crack hammer, (chisels-only if you want to break some large rocks), 5 gal. bucket, small hand truck if you plan on collecting a lot of rocks (buckets get heavy very quickly- just remember there is a charge of 1.50 per pound), flashlight, Rain poncho nice to have. Bottled water/snacks.

**Mine Descriptions / Hints** --- Research the web --- good info and pix of what to expect at the place is readily available. If you do your homework, your experience will be more enjoyable. Be prepared to do a lot of walking, the mine and museum tours take up a great deal of time and miles....very well spent time! A must for first timers!!

**Vehicles** --- Plenty of parking near the mine. Signs will be posted.

**Fees** --- Pre-register. \$20.00 per person to attend. Equipment can be rented. Must be member of the club for our insurance to be credited to attendees.

**Misc** --- Children 5-12 can only collect in the mine dump run. 12 and over can collect in the pits with the adults. All children can go on the tours as long as they are able to climb the ladders. This is a "rain or shine" event. It is still cold there in April, dress accordingly.

**Motels-** there are plenty of motels within 20 miles of the mine. The ones south of Ogdensburg are much more inexpensive than the ones north near the ski resorts. If you are interested in going, let me know and I will tell you which hotel I am staying in.



**The Southern Maryland Rock and Mineral Club**

**Meetings take place on the 4<sup>th</sup>  
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](http://SMRMC.org)**