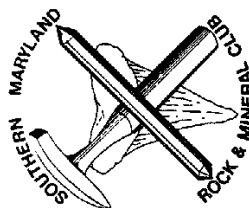




# RockTalk



## Message from the President

Boy it was hot out there today (June 29th, 104 degrees). It was hot enough to make rocks pop like popcorn. Believe it or not, we experienced that exact phenomenon during May's trip to North Carolina. We had spread out a bucket full of calcite, selenite and other minerals on a table to sort them out. It was a VERY HOT day (almost as hot as today). The table was in the hot sun. The minerals had just been extracted from the wall. As the temperature began to rise, so did the rocks...specifically the Selenite. We kept hearing popping noises and saw little bits of rocks flying everywhere. As it got hotter, more rocks began to explode. It was like we had one of those old hot air popcorn poppers sitting on the

table with the lid off. It was pretty entertaining, especially since we had our safety glasses on and didn't get our eyes shot out.

When we returned home and began to clean some of the specimens, we experienced the same phenomenon (unfortunately with a nice large smoky quartz crystal specimen). We had placed some of the quartz in a large black plastic pan full of water in the sun. After several hours, we decided to drain the water and add fresh water for cleaning. The dirty water in the pan was pretty warm from the sun. The fresh water was cool from the tap. Snap!! As soon as the cool water touched the six inch round quartz it cracked into three pieces. OOPS. I knew

this could happen with delicate little crystals, but I didn't think the temperature change was extreme enough to crack a large, dense specimen. My mistake!! Expansion and contraction of rocks can occur at even small temperature changes, so be careful when cleaning your specimens in the hot summer sun.

Unless you want to make pop-rocks... which we did try. We put some of the Selenite in the freezer for a day and then took it out and placed it in hot water to see if we could get it to pop. It didn't work. I guess we'll have to put it outside in the sun tomorrow when it's 110 degrees in the shade... or maybe we'll just stay inside in the air conditioning.

Stay cool!

### Inside this issue:

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### Meetings

..are held the 4th Tuesday of each month at 7:00pm.

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

**For more information, call Michael at  
(301) 297-4575.**

# EFMLS/AFMS News

Submitted by Jessica Dixon



Ellery Borow, the safety chair, writes about safety and first aid. Neither of these things should be an afterthought when going on field trips. He makes some very solid points. Check out his article and keep those ideas in mind when planning your own or a club trip.

For more information on any of these articles, visit [www.amfed.org/efmls](http://www.amfed.org/efmls)



Did you know there is a program competition? Do you have an idea for a program? Each year AMFS has a program competition where the winners can receive a cash award and their program duplicated so others around the country can view your presentation. Go to the AFMS website for more information!

There is also a great article about rattlesnakes and ways to avoid them and stay safe. With the weather as wacky as it is this year, this article is a must-read for staying safe on those field trips!

For more information, visit [www.amfed.org](http://www.amfed.org)

## Upcoming Shows and Events

Submitted by Ralph Gamba

**August 17 – 19:** Gem miner's Jubilee Lebanon Expo Center, Route 72, Lebanon, PA \$6 admission 10 AM – 6 PM Friday and Saturday, 10 AM – 4 PM Sunday. [www.gem-show.com](http://www.gem-show.com) 717-838-8870

**August 25:** EFMLS Region IV Picnic/Rock Swap. Gilbert Run Park, Charlotte Hall, MD. 9AM-3PM. \$4 parking fee.

**September 22 – 23:** Atlantic Coast Gem, Mineral and Jewelry Show. Howard County Fairgrounds, I-70 and MD Route 32. 10 AM – 6 PM Saturday, 10 AM – 5 PM Sunday \$5.00 admission. [www.gemcuttersguild.com](http://www.gemcuttersguild.com)

**September 29 – 30:** Diamond State Fossil and Mineral Show. Doubletree Hotel, 4727 Concord Pike/ route 202, Wilmington DE. 10 AM – 5 PM Saturday and Sunday. Free admission, free parking.

**October 11 – 13:** World Championship Crystal Dig. Fairgrounds Road, Mount Ida, Arkansas 71957. Mt Ida Chamber of Commerce at 870-867-2723

**November 17 – 18:** Gem, Mineral and Fossil Show presented by the Northern Virginia Club, Inc. 10 AM-6 PM Saturday, 10 AM – 4 PM Sunday Student Union II Building, George Mason University, Braddock Rd. and Route 123, Fairfax, VA Adults \$5, Seniors & teens \$3. [www.novamineralclub.org](http://www.novamineralclub.org)

*If anyone has information on any other local shows or rock events, contact Ralph Gamba at [rgamba@verizon.net](mailto:rgamba@verizon.net), so they can be included in this list.*

## SMRMC OFFICERS

**PRESIDENT:**  
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**VICE PRESIDENT (membership):**  
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**VICE PRESIDENT (Programs):**  
Lorna Larson  
Jim White

**VICE PRESIDENT (Field Trips):**  
Ralph Gamba  
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\*\*\*If corrections or additions are needed, please contact Rocktalk Editor

\*\*\*Cover Photo Courtesy of Microsoft Office\*\*\*

# June Minutes

By Harry League

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DATE: JUNE 26, 2012

MEETING WAS CALLED TO ORDER AT 7:20 PM, NO GUESTS WERE PRESENT

SECRETARY: No Report

TREASURER: EFMLS cards were received by Dave and given to Mike.

MEMBERSHIP: No Report

PROGRAMS: Tonight's program is a presentation by Rich on specimens he collected in Nevada in the 1980's.

Refreshments provided by Jim, Harry and Tina.

Volunteers signed up for Novembers program and refreshments.

FIELD TRIPS: Ralph talked about recent trips. Vulcan Quarry in Manassas, VA.

Harry talked about NC trip. Dave talked about items he brought in from sales from old collecting sites that are no longer available.

Upcoming trips: NVA fossils June 30th. National Limestone PA July 14.

EDITOR: No Report

WEB MASTER: Everything is up to date on web. Keep sending field trip reports to Bob.

OLD BUSINESS: Dave talked about SMRMC sponsoring rock swap at Gilbert Run Park in LaPlata on August 25th. Info. will be sent to all members.

Volunteers needed to help with swap.

Tina confirmed November meeting date to be November 27th.

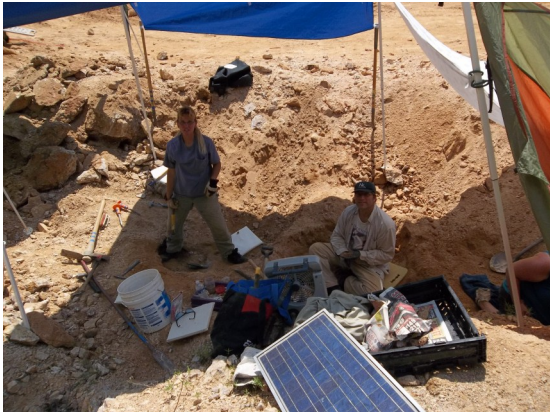
Linda's club stickers were available for everyone to take and give opinions on style, size, etc. to fill next order.

NEW BUSINESS: None.

ADJOURNED: Meeting adjourned at 8:30 pm followed by refreshments and Rich's program on Nevada collection.

# Reel Amethyst Mine and N. American Emerald Mines, NC

By Tina League



Memorial Day weekend Anna, Joe, Paula, Harry and Tina went to North Carolina for the MAG-MA Reel Amethyst Mine dig in Iron Station and the North American Emerald Mines in Hiddenite. Anna, Joe, Harry and Tina spent Friday at the Reel Mine digging for Amethyst. Everyone spread out in a trench along the vein and began digging in earnest. Some nice clusters were being found down at the bottom of the hill by the water, which inspired everyone to dig harder. The July type weather was a bit much to get used to (very hot and humid). Well before noon everyone was raising their canopies and um-

brellas to ward off the hot sun. We found some nice clusters and single crystals (some were purple, some clear and smoky). The best specimens were found in a very dark red sticky clay- the kind that is very hard to clean off of clothes and minerals. I found my best cluster by accidentally smacking it with the digging bar and sending it flying out of the hole. Fortunately it wasn't too damaged. By the end of the day we were all covered in sweat and clay and ready for a long shower. We packed up our gear and specimens and headed back to the hotel.

The next day Anna went back to the Reel Mine to continue her Amethyst hunt.

She found a nice size single crystal and some small crystals in matrix.

Joe, Paula, Harry and Tina went to the North American Emerald Mine in search of Emeralds. After a safety briefing we headed down to the mine. There was a lot of ground to cover, so we walked and scoped out the area. The weather continued to be hot and humid, so we took our time moving about. Everything sparkled in the sun due to the large concentration of mica and quartz crystals. There were so many nice specimens that it was hard to decide what to put in the buckets (they got very heavy very quickly).



We all found garnets, calcite, rutile, smoky, clear, and rose quartz, rutilated quartz, pyrite, muscovite mica, black tourmaline and a host of other minerals yet to be identified, but we were still in search of the elusive emerald. We spent the day digging in clay, pounding on hard rock and ground searching. At the end of the day, the owner was working in a restricted area of the mine on a pocket of crystals. He wanted to show his appreciation to us for coming out to the mine and sticking with it even though the weather was so unbearable, that he brought us a bucket of his "ruble" to play with. We dumped it on a table at the shade canopy and began to sort through it. We found some nice calcite crystals with mica, rutile and tourmaline, some impressive smoky quartz crystals, and other minerals. After sifting through the larger pieces, we began to pick at the "dust particles"...and there were tiny emeralds in there....wow! We were very excited- even though they were small-they count! Needless to say, I had to be dragged out of the mine at the 6:00 deadline. We returned to



# Reel Mine

CONTINUED

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the mine on Sunday morning and continued the hunt.

We hunted for specimens and had planned on leaving a little earlier in order to head home that night- but then the owner sent up 3 more buckets of "goodies" for everyone to sort through. We all spent several hours sifting through the rocks and dust. Many nice specimens were collected by all- and everyone who sifted found a tiny emerald or two.

We had a great time, and thanked everyone at the mine and headed home.

It was a very memorable Memorial Day weekend.



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## Editor's Message

By Jessica Dixon

Happy Summer Everyone! Just a couple of notes from yours truly:

1. This month's RockTalk is for the month of July and August, remember August's meeting is the potluck and auction!
2. PLEASE take a look at the Rock Swap Flyer on page 9! Contact Dave if you would like to help with the setup. Remember we are hosting the swap this year. Let's make it a great event!
3. STAY COOL! The temps out there are insane and it is easy to forget some of the basics.

Hydrate, hydrate, hydrate

Sunscreen, even on a cloudy day

Light, comfortable clothing

Bug spray

Take breaks

Be safe and have fun!

# Hair: Vulcan, Manassas Quarry

By Ralph Gamba



On June 9, six members of the Southern Maryland Rock and Mineral Club, Tim, Jim, David K, Jennifer, Ralph and Mary, traveled to the Vulcan Manassas Quarry for a morning of collecting, Figure 1. Members of the Northern Virginia and Montgomery County clubs also joined us. Approximately 16 club members collected.

TJ from Vulcan provided the sign in sheets and gave a safety briefing. Ted from the Northern Virginia club also provided more safety information.

TJ led us into the quarry for a morning of collecting. Mary found some flat rocks for her garden. Ralph found a couple pieces containing pyrite. Another collector found a piece with prehnite.

A number of collectors gathered around a boulder. They discovered a beautiful chunk of prehnite in the boulder. Everyone took turns chipping away at the boulder, Figure 2, and extracted wonderful samples of prehnite. Some of the prehnite appeared to have datolite on it. Ted discovered that one of the vugs had a hair-like mineral in it. Careful extraction provided samples of the mineral.

While awaiting his turn, Ralph noted a rock with a vein of a mineral with a pale purple color. He extracted a number of samples, enough to give anyone who wanted one. Later, another collector identified the purple material as amethyst.

Soon, some of the collectors went to another level and found some stilbite-Ca. (Dr. Kearns from James Madison University analyzed a sample and determined that the substance was stilbite-Ca.) Ralph remained and chipped a sample from the boulder of small calcite crystals coating prehnite.

Tim made the discovery of the day. Not too far from the prehnite boulder, he found a boulder with numerous vugs with beautiful calcite crystals. Ted described the calcite as “the best ever found here”.

The largest vug contained more of the hair-like crystals. Later we identified the hair-like samples as byssolite, a member of the tremolite actinolite series of amphiboles. One collector had a high power loupe and saw stilbite crystals attached to the byssolite. We suggested to Tim that he not wrap the sample, to keep it out of the wind and to store it in a glass case to protect the byssolite. Tim also summed up our day when he said “When can we come back?”

At 11:45, TJ returned to escort the remaining collectors back to the parking lot, where we bragged of our discoveries. The find of the day was Tim’s calcite with “hair”. We thanked TJ and went on our way.



# Geology Basics

By Jessica Dixon

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As a teacher, I am always looking for ways to break down larger ideas into smaller ones that my students can process. I find as I am learning about rocks and minerals, it helps to do some of the same things so I can process and understand what I am looking at.

So, in that spirit of learning, let's break things down to the basics.

**Minerals:** unique chemical substances which are the same throughout the specimen. Could be single crystals or clusters of many.

There are minerals that are common and some that are rare. Even the common minerals can come in rare forms and can be useful in human life. Many minerals are prized for their beauty and are most often used in jewelry. Gemstones are precious or semi-precious based on how easy they are to find.

**Rocks:** a group of minerals found together. The type is determined by the type of mineral as well as where it is formed.

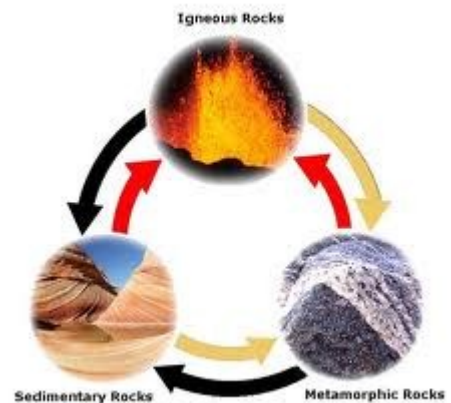
A great example of this: quartz, feldspar, and mica are individual minerals but found together in a rock that formed underground, it is often called granite.

Three types of rocks:

**Sedimentary:** Formed when sand, small pieces of rock, or mud are pressed together to form layers of sediment, which are then pressed together over a long period of time and form a sedimentary rock.

**Igneous:** Forms from hot liquid magma from a volcano whether it erupts above or below ground and then hardens to form rock.

**Metamorphic:** Formed when a sedimentary or igneous rock changes form because the temperature or pressure changes over time when the rocks are buried beneath the earth's surface.



The next time you're out on a trip looking at those awesome finds, think about what category they fall into and where they came from. Can you identify the basics?

Sources: [http://www.minimegeology.com/home/mgeo/page\\_21/geology\\_article.html](http://www.minimegeology.com/home/mgeo/page_21/geology_article.html)

[http://www.rocksandminerals4u.com/rock\\_cycle.html](http://www.rocksandminerals4u.com/rock_cycle.html)



# 2012 Rock Swap

Submitted By Jessica Dixon

## 2012 Region IV Picnic and Rock Swap

Hosted by The Southern Maryland Rock and Mineral Club  
And  
Carl Miller, EFMLS Region IV Vice President



**When** : Saturday, August 25, 2012, 9am-3pm

**Where** : Gilbert Run Park, 13140 Charles St, Charlotte Hall, MD 20622

**Schedule**: 8:00 a.m. — pavilion available for our use / 9 - 3 — swapping / noonish— picnic lunch for all / After lunch — doorprizes drawn followed by the auction / 3:00 p.m. — picnic over / cleanup area / drive home safely

\***(all attendees)** are kindly requested to donate labeled mineral/lapidary/ fossil specimens for doorprizes and the auction — this raises cash for next year's picnic.)

### Directions:

1. Recommend "Mapquest" to La Plata on U.S. Rt.301, then
2. Turn EAST on MD Rt. 6 (Charles Street) thru town and go 9.0 miles
3. Look for brown "Gilbert Run Park" sign — Park Entrance is on LEFT.
4. Pay \$4 vehicle Entrance Fee and continue STRAIGHT BEARING LEFT
5. Go 0.3 miles to a reserved paved parking area on RIGHT for "Hill Top Pavilion"
6. You may drive your vehicle to the top to unload and then re-park in the paved parking lot below the Pavilion

**"Treasure Box"** — As before, there will be a Treasure Box that everyone can take stuff from — for FREE. The theme has always been: "One person's "extras" may be another person's treasure." Please bring lots of your "extras" (i.e., minerals/lapidary/fossils) — with labels — and other rock related items to put in the Treasure Box. Thank you.

This is a **Potluck** — Please bring a dish (side/main/dessert) to share. Hotdogs/burgers/plates/utensils/drinks (no alcohol in park) will be provided.

**Guests are welcome.**



**Venue** is a shaded, hill-top pavilion with 15 picnic tables in the woods above a 60 acre lake with full restroom facilities on site. Other activities in this Park include: 2 mile walking path around the lake/fishing (license required)/boat rental/playground/horseshoe pits (one by our pavilion)/volleyball/concession stand

**Bonus field trip info:** Several excellent fossil hunting sites (open to the public) are within 30 miles of the picnic location. \*\*Low tide on the Chesapeake Bay at Matoaka Beach Cabins is 3:18 pm (Fee: \$4/adult, \$2/child under 12). \*\*\*Low tide at Purse State Park on the Potomac River is 7:58 pm /sunset is 7:49 pm. Free.





# Amethyst

By Cheryl Reese

# Amethyst

*Amethyst derives its name from the ancient Greek 'amethystos', meaning literally "not drunk" as it was believed to guard against drunkenness.*

**Cabochons**



**Tumbled stone**



**Jewelry**



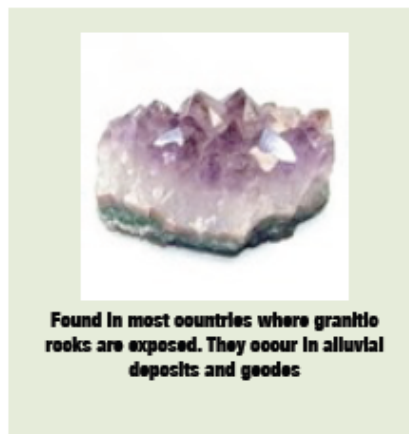
## Member of the quartz family

*The color ranges from pale to deep purple and when heat treated, amethyst crystals change color to yellow-brown. Many crystals sold as Citrine are actually heat treated amethyst.*

In the early Christian church, amethyst was believed to have sobering properties. The mineral was adopted as a symbol of the high spiritual state its bishops must attain and an amethyst ring became part of the bishop's regalia. Even today, the highest grade amethyst is referred to by gem cutters as "Bishop's Grade".

### TRADITIONAL GEMSTONE

The amethyst has a long history in ancient civilizations of Mesopotamia, where it was highly



valued and used to create cylinder seals used for engraving. Ancient Egyptians, also highly valued amethyst and used it a lot in jewelry making. The ancient Greeks believed that drinking wine from a cup made of amethyst would make them immune to intoxication. It has been used since about 25,000 BC.

### SPIRITUAL PROPERTIES

Amethyst facilitates meditation and aids in the communications with one's guides and angels. It aids in the development of intuitive and psychic ability by clearing the crown chakra and third-eye.

Amethyst has traditionally been used to counter addictive behavior and thought patterns. It is a powerful healer and protector and enhances spiritual awareness. It calms the mind and enhances meditation and visualization. Amethyst aids in the assimilation of new ideas and it also relieves physical and emotional pain.

### POSITION

Place on all parts of the body, especially on the throat or chest

### Resources:

The Book of Stones by Robert Simmons and Naisha Ahsian  
Rock and Gem the Definitive Guide to Rocks, Minerals and Fossils by The Smithsonian  
The Illustrated Guide to Crystals by Judy Hall



# ROCKTALK

Clearwater Nature Center  
Maryland-National Capital Park &  
Planning Commission  
11000 Thrift Road

**Next Meeting**  
**July 24, 2012**  
**7:00 PM**

We're on the web:

[SMRMC.org](http://SMRMC.org)

July's  
Refreshments/  
Programs

## Refreshments:

Penny Masuoka

## Program:

Penny Masuoka: "The Geology of Maryland and Three Interesting Parks to Visit". An overview of the geology of Maryland and the geology and minerals and/or fossils that can be seen (but not collected) in Dinosaur Park, Soldiers' Delight, and Sideling Hill.

## August Program/Refreshments

Annual Potluck and Auction! Look for a flyer in August for more information!

Field Trips: For more information on upcoming trips, please contact the trip leader.

Date	Place	Leader
July 12	National Limestone Quarry	Ralph Gamba
August 25	Region IV Picnic and Rock Swap	Dave Lines
October 11 -13	Mount Ida, Arkansas	TBD