



Happy St. Patrick's Day!

## Presidents Message:

Hello To All,

We have talked about more workshops at Dave Callahan's, utilizing the 24" diamond saw and the new to us lapidary machine with the grinding wheels, sanding belts and polishing wheels. This equipment will be useful in making items for the upcoming festivals as well as an opportunity for members to do projects for their own use. I said that to say this, if the Club is fortunate enough to have a good fund raising year in 2009 I would like to see us purchase a couple of Genie type Cabbing machines for use at our monthly club member workshops at Dave Woolley's house. They seem to cost between \$900 - \$1800. Also these machines are portable enough to use for demonstrations of our craft at festivals and to schools and other venues. The January workshop was attended by several members that wanted to make a Cab on our lapidary equipment, as you know that workspace is very limited at this one mandrel and

there can be a long wait for your turn to make a Cab. This type situation happens very frequently and I know it is discouraging to start on a project and have to stop and wait maybe one or two months to complete. We have a larger number of members now and we need to have equipment and helpful instruction available for them. If we want to see the club grow in size and in expertise in jewelry making, etc, we should be willing to provide an environment for growth by the membership. Who knows- we may even inspire a future gemologist or a professional geologist. I hope that this is a project that the club can get behind and support. If any of you have any ideas of other equipment that the club will get good use out of, please don't be afraid to voice your opinions. The GMSL is for all members.

*Continued on pg. 11*

## From the First VP:

Prehnite is the mineral for March. Prehnite is calcium aluminum silicate with a chemical formula of  $\text{Ca}_2\text{Al}_2\text{Si}_3\text{O}_{10}(\text{OH})_2$  and is in the orthorhombic crystal system. I have a specimen of some of the finest North American prehnite which has come from the Eric Stanchich collection, Upper New Street Quarry, Paterson, New Jersey. This prehnite is green and resembles a bunch of grapes. When a mineral habit resembles a bunch of grapes it is called botryoidal. Prehnite is a stone of unconditional healing and can put you in touch with the energy grid.

Yes, Virginia there has been volcanism in Virginia. Our thanks go to guest Mark Tinsley for

an informative program about Volcanism in the Valley. Now we know where Trimble Knob is and how it got there. I learned a new word, orogeny. Orogeny means mountain building. So may you have an orogeny of rock collecting and lapidary until the next meeting.

The next meeting is all about mineral identification. The plan is to have four or five stations set up at different corners of the room. Each station will have a small display of mineral identification and a subject matter expert. We will divide into small groups. Each group will rotate around the station and talk with the subject matter expert. This will go well, I'm sure.

Cheers,  
Steve

**2009 ELECTED OFFICERS****John Haskins - PRESIDENT**

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JoAnn Mason &amp;

Tom Powers

**COMMITTEE****CHAIR PERSONS:****Field Trips-** David Callahan**Hospitality-** Anne Torning**News Articles-** Natalie Darling**Silent Auction-** Warren Darling**Special Events-** Dee Tinsley**Swap for Rocks-** Warren Darling**Website-** Alan Rice**Workshops-** Dave Woolley**FRA Adult Liaison-** David Murphy**Membership-** Ralph Torning**February Meeting Minutes****Meeting:** Wednesday, February 18, 2009**Attendance:** 34 members and 4 guests**Hospitality:** Thanks to everyone who generously supplied food and drink.**On Time Drawing:** Frank Midkiff, Alan Rice, Siglinde Allbeck, and Bob McIntyre were all winners**Old Business:** John Haskins reminded the members about the Southeastern Federations Wildacres and William Holland workshops. For details, dates, cost, etc visit the AFMS website. We are still in need of donated specimens for our nature zone and Mt. Athos displays.**First Vice President:** Steve Boylan announced that the program would be Volcanism in the Valley, with Mark Tinsley, assistant professor of geology at CVCC. The March program will be mineral identification.**Second Vice President:** Dave Callahan noted the field trips as follows: 2/21 bus trip to the Smithsonian Museums in Washington DC; 2/28- American Rutile Quarry in Nelson County; still working on a field trip for 3/21 or 3/28. The Gem and Mineral show in Kentucky will be sometime in April.There were some boxes and labels left behind at the JMU field trip specimen purchase. If you purchased a specimen and do not have a label, please contact Dave Callahan. The annual Franklin NJ collecting trip for fluorescent minerals will be April 26<sup>th</sup>-28<sup>th</sup>.**Treasures Report:** Franklin Midkiff reported a balance of \$2,443.93, with no outstanding bills.**10-minute presentation:**

Dave Woolley spoke on volcanic rock and showed a volcanic rock specimen from Arizona.

**New Business:** John Haskins gave an explanation of how the silent auction works.

We also need to start planning our workshops to create bookends, spheres, grab bags and sluice buckets for the upcoming festivals that we will participate in. Much of this work has to be done outside, so nice weather is preferable.

**Minutes submitted by  
Dorothy Rivera, Secretary**

The purpose of the Gem & Mineral Society of Lynchburg, VA, INC. is to promote education in The Earth Sciences including: Mineralogy, Geology, Gemology, Paleontology, and Crystallography

*The Gem and Mineral Society of Lynchburg VA, Inc.  
Meets on the third Wednesday of each month,  
From 7:00pm- 9:00pm  
In the auditorium of the Parks and Recreation Building  
301 Grove St. Lynchburg, VA 24501  
Public is invited, Please join us!*

# Programs

For our **February Program**- We enjoyed learning about Volcanism in VA, and Trimble Knob. Special thanks to Mark Tinsley of CVCC for sharing his knowledge on this subject with us.

## Announcement for March Meeting



Mineral Identification - Subject matter experts will identify rocks and minerals from all parts the earth and universe. No rock or mineral should be unidentified. There should be a law. So bring your minerals to be identified and we will put a name on it.

### MOH'S HARDNESS SCALE

- #1 - TALC
- #2 - GYPSUM
- #3 - CALCITE
- #4 - FLUORITE
- #5 - APATITE
- #6 - FELDSPAR
- #7 - QUARTZ
- #8 - TOPAZ
- #9 - CORUNDUM
- #10- DIAMOND

### HARDNESS RATING OF SIMPLE TEST ITEMS

- FINGERNAIL = 2 ½
- PENNY = 3
- KNIFE BLADE = 5 1/2-6
- FILE = 7+
- EMERY CLOTH = 8 TO 9

EACH MINERAL CAN SCRATCH ANY MINERAL WITH THE SAME OR LOWER NUMBER & CAN ITSELF BE SCRATCHED BY ANY MIN. WITH A HIGHER NUMBER

### PHYSICAL PROPERTIES FOR THE USE OF MINERAL IDENTIFICATION

**COLOR**----- SOME MINERALS EXIST IN MANY DIFFERENT COLORS

**STREAK**----- STREAK PLATE WORKS ON MINERALS OF LESS THAN 6 1/2

**LUSTER**----- METALLIC, SUBMETALLIC, VITREOUS(GLASSY), SILKY  
ADAMANTINE(BRILLIANT), RESINOUS( RESINLIKE), GREASY  
OILY, PEARLY, WAXY, DULL OR EARTH LIKE.

**HARDNESS**-- SCRATCH RESISTANCE

**CLEAVAGE**-- BREAKS ALONG SMOOTH, FLAT OR LUSTROUS SURFACE.

**PARTING** ----- WEAKNESS ON SMOOTH FLAT PLANES

**FRACTURE** -- BROKEN SURFACE CAN BE UNEVEN, CONCOIDIAL, HACKLY,  
SPLINTERY, EARTHY

**CRYSTAL HABIT**-- VISIBLE EXPRESSION OF INTERNAL ATOMIC STRUCTURE

LESS COMMON PHYSICAL PROPERTIES MAY BE TESTED BY

**TASTE, ODOR, FEEL, MAGNETISM, FLUORESCENCE, RADIOACTIVITY**

*Submitted by John Haskins*

# Field Trip Report

PAST COMBINED FIELD TRIPS



*Field Trip Report submitted by  
Dave Callahan,  
field trip chairman.*

## DIAMOND HILL MINE

Antreville, South Carolina ~ Saturday, January 31, 2009



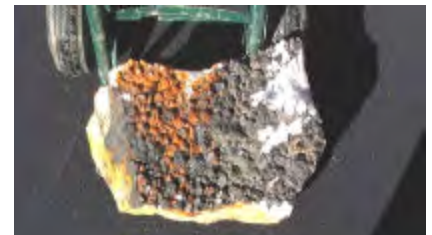
It was a long ride to Antreville, South Carolina for this Dixie Mineral Council sponsored field trip as the 26 members from the Lynchburg and Roanoke Clubs can attest. Most of us drove down on Friday and returned home on Sunday, but there were a few that left very early Saturday morning and returned home late Saturday night.

The field trip was well attended by many clubs that are members of the DMC or have their Liability Insurance with the Southeastern Federation. My guess was there were perhaps 130 in attendance from clubs in Georgia, Florida, Alabama, North Carolina, South Carolina and of course Virginia. These were all the license tags I noticed, but I may have missed a few.

There were many fine Quartz crystals found including some Amethyst and Smokey varieties. Some of the Quartz is milky white but much of it has a beautiful yellow to brown to red Hematite or iron stain. There is also Manganese present that will add a jet-black coating over Hematite. These color combinations make a striking display and many people choose to leave it this way. Some remove this color with acid but the coating will still be there only white.

Some of the crystals are referred to as Skeletal. I don't believe that it is an official name, but it pretty well describes the crystals found in one area of the vast open pit. The corners of the crystal are intact but the area between appears to be dissolved away or failed to grow properly. In either case, something changed during the growth process and the crystals are unique and make very unusual specimens.

If there is enough interest, I will try to schedule another trip for just our club members, after the mine owner schedules another machine dig and uncovers fresh material. This would be in the spring or fall, as South Carolina can get very hot in the summer.



*Photos submitted by Dave Callahan and Roanoke club member Rich McClevey. Additional photos on pg. 13 for electronic viewers.*

# Field Trip Report

*Continued from page 4*

**SMITHSONIAN INSTITUTE  
MUSEUM OF NATURAL SCIENCE  
WASHINGTON, DC  
Saturday, February 21, 2009**



The weather was clear but crisp this Saturday morning as the Abbott Trailways Bus rolled into the Wal-Mart parking lot at 5:30 AM. The group had started to gather and immediately boarded the Bus to find their favorite seat. At 6:00AM after a headcount to insure that everyone was aboard, we departed.

The journey north on I-81 was quiet with not a lot of traffic. It was quite a relief to sit back in a comfortable seat, watch the scenery roll by and enjoy the beautiful sunrise. As drivers, we seldom have this luxury as we are concentrating on the road ahead.



We stopped briefly at the rest area north of Harrisonburg, which is about half way. It was still chilly and it felt good to get back on the warm bus. The journey into the center of our Nations Capital was very inspiring. We passed by many famous buildings and monuments, some familiar, some not. The traffic was heavy at times and the ever-present road construction and repair was everywhere. We arrived on time about 10AM and gathered on the steps for a group photo. Folks scattered in every direction to see the sights and buildings of their choosing. Most of us at least started in the Gem and Mineral section before moving on to other points of interest.

The Atrium Café offered a wide selection of food. Although a bit pricey by our local standards, it was probably average for the DC area. I understand from talking to others, that the IMAX Theater had wonderful films on Dinosaurs and the Deep Sea. The Live Butterfly Pavilion was a worthwhile adventure as well. This museum is so large that there is no way to fully explore every hall and exhibit in our brief 7-hour stay. For some reason, I find it difficult to tear myself away from the fantastic mineral exhibit. There is not much new from year to year but the sheer beauty of the specimens on display there are an amazing sight and keep me inspired.



We all boarded the bus about 5:15, as it was a bit late due to the heavy 5 o'clock traffic. Our scheduled stop for dinner was at the Golden Corral Buffet and Grill in Manassas.

During the ride home, we watched National Treasure 2, Book of Secrets. This Disney DVD was an adventure to find the Lost City of Gold. We arrived safely at the Wal-Mart about 11:00 PM and everyone headed home. Big thanks go to our driver and Lynchburg Club member, Bill Tinsley for a safe trip. From what I hear, everyone had a great time and we had a lot of new members attending. Hopefully we will be able to schedule another trip next February.

*Additional photographs on page 13 & 14 for electronic viewers*



# Upcoming Field Trips

For further information on field trips, contact David Callahan,  
540-297-1853  
Email [dbcall1@aol.com](mailto:dbcall1@aol.com)

**Sign-up required for all field trips. Call, email, or see me at the club meeting.**

## COMBINED MINERAL COLLECTING FIELD TRIP

THE GEM & MINERAL SOCIETY OF LYNCHBURG, VA. INC.  
AND  
THE ROANOKE VALLEY MINERAL & GEM SOCIETY, INC.

**SATURDAY. MARCH 21. 2009** ~ 8:30 to 8:45 assembly at the office  
8:45AM safety briefing and hazard training (you must be present for this important meeting)  
9AM to 1PM collecting

### **MARTIN MARIETTA MATERIALS EAST ALAMANCE QUARRY, HAW RIVER, NC.**

**THE TRIP:** This is a new quarry for us and we will be driving on our own, as it will be impractical to keep a convoy together. I will suggest a route, but you should plan your own trip based on your knowledge of the area and time you allot for the 100 plus mile trip. I will have a map available at the meeting with the suggested route.

**RESTRICTIONS:** No one under 18 will be allowed in the quarry. Hard hats, steel toed boots and safety glasses will be required at all times while in the quarry. All safety rules will be reviewed at the safety meeting and will be strictly enforced. Anyone not obeying the high wall, barrier and other stated rules would be asked to leave the quarry immediately. It is extremely important that we have a safe trip and obey all the stated and obvious safety regulations. Quarries can be very hazardous, we want to be invited back and have access to other Martin Marietta facilities in the future.

**COLLECTING:** Since this is a new quarry for us, I'm not sure exactly what we will find. I do know that there has been some beautiful and rather large epidote crystals found along with a host of unusual zeolites. The quarry manager says that there is a lot of pyrite around. It should be interesting to see what we can find. There are actually two quarries, side by side, one was a Luck Stone facility and the other was Martin Marietta. Both are now Martin Marietta facilities. We may have access to both. We will be able to drive into the quarry.

**THE TRIP:** The suggested route from Lynchburg is US 29 south to Danville, VA, about 63 miles. Follow the US 29 south bypass around to Rt. 86 south. Follow Rt. 86 south for about 9 miles where it joins US 158 in Yanceyville, NC. Follow 158 east and 86 south thru town for about 2 miles to Rt. 62 south. Follow Rt. 62 south for about 15 miles to Pleasant Grove, NC. to Rt. 49. Follow Rt. 49 south for about 5.5 miles and just thru the little community of Green Level, you will see the Martin Marietta, East Alamance Quarry sign on the right. The distance from Lynchburg thus routed will be about 100 miles. Allow a minimum of 2 hours 30 minutes plus stops. The distance from Roanoke thus routed will be about 126 miles. Allow a minimum of 2 hours 45 minutes plus stops.

Turn at the quarry sign and drive a short distance to the office. Park here and do not block any traffic that might be moving into or out of the quarry. Plan your arrival so that we can assemble at the office or gate, if closed between 8:30AM and 8:45AM. We will have a mandatory safety briefing and hazard training at 8:45AM. Everyone must be present and releases will be signed.

**GENERAL INFORMATION:** Dress according to the weather this day in Burlington, NC. It may be hot, cold or wet so come prepared. Bring snacks and water. Safety gear should include hardhat, safety glasses, gloves and steel-toed boots. Also long pants and long sleeved shirt. Collecting gear should include crack hammer, chisels, and sledge if you're into heavy collecting, collecting buckets or bags and newspaper to wrap those fragile specimens.

**CONTACT:** David Callahan, Field trip Chairman, [dbcall1@aol.com](mailto:dbcall1@aol.com), home phone 540-297-1853, Cell 540-874-5201. If I don't answer, let it ring until the answer machine picks up. I'll return your call.

# Schedule of Events...



## SHOWS & TRIPS

**March 21<sup>st</sup>**- GMSL field trip to Alamance Quarry, Haw River, NC  
See pg. 6 for details.

**March 20<sup>th</sup>-22<sup>nd</sup>**- annual gem, Mineral & Jewelry Show sponsored by the Catawba Valley Gem & Mineral Club. Hickory Metro Convention Center; Hickory, NC

**March 28<sup>th</sup>**- DMC Trip to Memphis Stone and Gravel Company, Arlington, TN Details on pg. 11.

**March 28-29, 2009**- Western Massachusetts Mineral, Jewelry & Fossil Show sponsored by the Connecticut Valley Mineral Club. Holiday Inn at Ingleside, Holyoke, MA.

**April 17<sup>th</sup>-19<sup>th</sup>**- Treasures of the Earth Gem, Mineral, Fossil, and Beads Show, Charlottesville, VA.  
[www.toteshows.com](http://www.toteshows.com) for details.

**April 17<sup>th</sup>-23<sup>rd</sup>**- First spring session of Wildacres.  
[www.AMFED.org.EFMLS](http://www.AMFED.org.EFMLS) for details or to download an application.

**May 22<sup>nd</sup>-24<sup>th</sup>**- Treasures of the Earth Gem, Mineral, Fossil and Beads show at the Salem Civic Center.  
[www.toteshows.com](http://www.toteshows.com) for details.

**May 29<sup>th</sup>-31<sup>st</sup>**- Treasures of the Earth Gem, Mineral, Fossil and Beads show at the National Guard Armory, 315 Commonwealth Blvd, Martinsville, VA  
[www.toteshows.com](http://www.toteshows.com) for details.

## March 2009

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17	18 <i>Meeting 7:00 PM</i>	19	20	21
22	23	24	25 <i>Woolley's workshop</i>	26	27	28
29	30	31				

### UPCOMING PROGRAMS

**For the March 18<sup>th</sup> meeting, we will enjoy a program on mineral identification by our knowledgeable club members.**

### T-Shirt Orders

The tee shirts ordered will be in for the meeting on March 18<sup>th</sup>. Here is the pricing so please bring a check made out to GMSL or the correct change.

#### **Standard short-sleeved shirts**

S thru XL will be \$7.50 each.

XXL will be \$9.50 each.

#### **Long-sleeved shirts**

S thru XL \$8.50 each.

XXL \$10.50 each



# Rock Raiders

## Volcanoes Part II

As reprinted from Zack's Rocks & Minerals  
Newsletter, January, 2009

For more articles and information on  
volcanoes, please visit Zack's web site  
[http://www.zacksrocksandminerals.com/  
volcanoes/](http://www.zacksrocksandminerals.com/volcanoes/)

### Shield Volcanoes

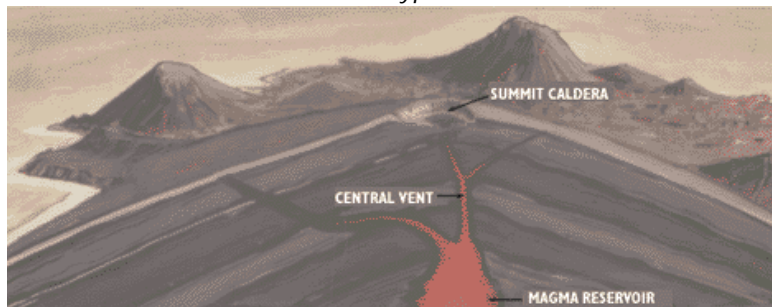
Mauna Loa Volcano, Hawaii, a giant  
among the active volcanoes of the world;  
snow-capped Mauna Kea Volcano in the  
distance. →



Shield volcanoes, the third type of volcano, are built almost entirely of fluid lava flows. Flow after flow pours out in all directions from a central summit vent, or group of vents, building a broad, gently sloping cone of flat, domical shape, with a profile much like that of a warrior's shield. They are

built up slowly by the accretion of thousands of highly fluid lava flows called basalt lava that spread widely over great distances, and then cool as thin, gently dipping sheets. Lavas also commonly erupt from vents along fractures (rift zones) that develop on the flanks of the cone. Some of the largest volcanoes in the world are shield volcanoes. In northern California and Oregon, many shield volcanoes have diameters of 3 or 4 miles and heights of 1,500 to 2,000 feet. The Hawaiian Islands are composed of linear chains of these volcanoes including Kilauea and Mauna Loa on the island of Hawaii-- two of the world's most active volcanoes. The floor of the ocean is more than 15,000 feet deep at the bases of the islands. As Mauna Loa, the largest of the shield volcanoes (and also the world's largest active volcano), projects 13,677 feet above sea level, its top is over 28,000 feet above the deep ocean floor.

*The internal structure of a typical shield volcano.*



In some eruptions, basaltic lava pours out quietly from long fissures instead of central vents and floods the surrounding countryside with lava flow upon lava flow, forming broad plateaus. Lava plateaus of this type can be seen in Iceland, southeastern Washington, eastern Oregon, and southern Idaho. Along the Snake River in Idaho, and the Columbia River in Washington and Oregon, these lava flows are beautifully exposed and measure more than a mile in total thickness.

*Continued on page 10*

### Mission Statement

Future Rockhounds of America is a nationwide nonprofit program within the American Federation of Mineralogical Societies that develops and delivers quality youth activities in the earth sciences and lapidary arts in a fun, family environment. Our underlying goals are to foster science literacy and arts education through structured activities that are engaging and challenging and by which kids- and the adults who mentor them- learn while having fun.



## News from the Eastern Federation Great Prizes Ahead!

By Ellery Borow, EFMLS Ways & Means Chair

*Reprinted from EFMLS News, Volume 46, number 5; March 2009*

As I indicated last month, we have some great prizes to offer in our 2009 EFMLS Ways & Means drawing. With the roller-coaster ride of our present economy we are steadfastly holding the line on ticket prices to \$1.00 per ticket. The small sum of \$1.00 will give you an opportunity to enter a drawing for one of the following prizes:

- 1.) An 8.36 ct. watermelon tourmaline pendant wire wrapped in 12kt gold. The simply elegant design secures a deep rich green "rind" of watermelon tourmaline with a rose pink center that just glows with life. You really should visit the EFMLS web site to see color photos of this beautiful jewelry. Estimated value \$180.00.
- 2.) A closely matched pair of Herkimer diamonds is featured in a novel wire wrap earring design. The 12kt gold wire frames and highlights as much of the gemmy crystals as possible. Ear wires are 14kt gold. Estimated value \$120.00.
- 3.) A positively striking pendant of 12kt gold wire wrapped pyritized ammonite fossil. The perimeter of the shell still exhibits the iridescent coloring of this famous fossil material. Interior portions of this specimen are fully pyritized and exhibit fine micro crystals throughout. The photos just do not do this fine piece the justice it deserves. Estimated value \$110.00
- 4.) A beautiful "framed" picture jasper. This piece is titled "Desert Night" and is number 1 in a series of picture jasper paintings. It is numbered and signed by the artist. Estimated value \$140.00.
- 5.) An 8X10 floral "painting" of tumbled amethyst stones and brass wire, an amazing piece is enhanced by the wire stems extending out from and seemingly floating above the background. This piece has to be seen to be appreciated. Estimated value \$65.00.

There will also be one special surprise prize that will not be described other than to say, if you are the lucky winner, you will be in for a real treat and a wonderful surprise.

To see these and additional prizes, including the special one, live and in person, you'll have to visit the **EFMLS convention in Bristol, CT on October 16-18 hosted by the Bristol Gem and Mineral Club**. Fortunately, you do not have to be present to win - all you have to do is to contact one of the folks who will have tickets for the drawing.

Tickets will soon be mailed to club presidents and all EFMLS officers and committee chairs and will also be available at the EFMLS Wildacres Workshops. At \$1.00 per ticket, it's a rear bargain indeed.

While the prizes are the thing, every dollar raised by ticket sales will go to support the Eastern Foundation Fund. The interest from this fund is available to support special projects and programs benefiting all EFMLS affiliate clubs. Your dollars do not just earn a chance to win great prizes; they also help support the EFMLS!

Please join us in participating in this great drawing- and think about those great prizes! Remember, you can't win unless you enter... and those who enter have a great chance to win some fabulous prizes.

If you have any questions, or are interested in making a donation, please contact me.



### AFMS/NFMS SHOW & CONVENTION

JULY 30, 31 AUGUST 1, 2 2009



**30,000 SQ FEET OF GEMS, JEWELRY, FOSSILS, & MINERALS**

**SEE THE MOON ROCK FROM NASA**  
**DINOSAURS \* YOGO SAPPHIRES \* CAVE BEAR**

**WHERE: HOLIDAY INN TRADE CENTER**  
5500 MIDLAND ROAD  
BILLINGS, MONTANA

**HOURS: THURSDAY, FRIDAY, & SATURDAY - 10AM-6PM**  
**SUNDAY - 10AM-5PM**

**Tickets: \$5.00 Ea.**  
**2 Day Pass \$8.00**  
**4 Day Pass \$15.00**  
Children under 12 free with adult



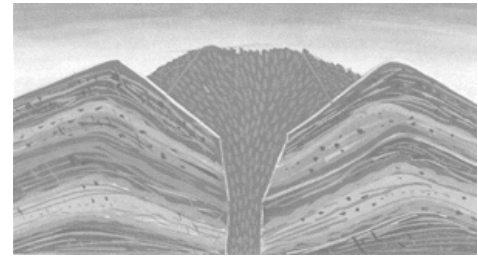
Shop @ more than 35 Jewelry, Gem, Mineral, Fossil, and Lapidary Dealers  
Demonstrations, Educational Displays  
Silent and Live Gem and Rock Auctions  
A full week of Field Trips after the show

For more information: email Doug True @ [dtruefossils@yahoo.com](mailto:dtruefossils@yahoo.com) Call (406) 670-0506  
ALSO CHECK OUT WEB: [WWW.AMFELORS/NFMS-FEDERATIONSHOW](http://WWW.AMFELORS/NFMS-FEDERATIONSHOW)

*2009 American Federation Show Flyer*

## Volcanoes...continued from page 8

*Schematic representation of the internal structure of a typical volcanic dome. —→*

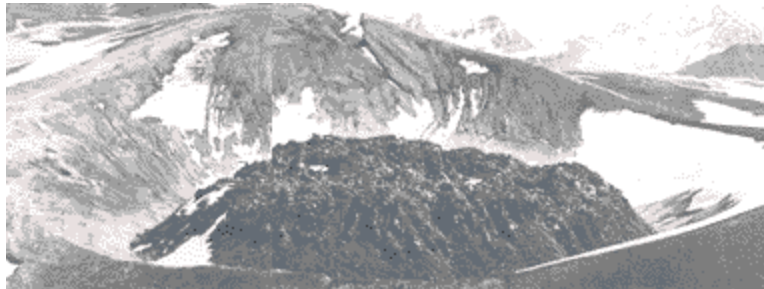


### Lava domes

Volcanic or lava domes are formed by relatively small, bulbous masses of lava too viscous to flow any great distance; consequently, on extrusion, the lava piles over and around its vent. A dome grows largely by expansion from within. As it grows its outer surface cools and hardens, then shatters, spilling loose fragments down its sides. Some domes form craggy knobs or spines over the volcanic vent, whereas others form short, steep-sided lava flows known as "coulees." Volcanic domes commonly occur within the craters or on the flanks of large composite volcanoes. The nearly circular Novarupta Dome that formed during the 1912 eruption of Katmai Volcano, Alaska, measures 800 feet across and 200 feet high. The internal structure of this dome--defined by layering of lava fanning upward and outward from the center--indicates that it grew largely by expansion from within.

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*The Novarupta Dome formed during the 1912 eruption of Katmai Volcano, Alaska. —→*



Mont Pelée in Martinique, Lesser Antilles, and Lassen Peak and Mono domes in California are examples of lava domes. An extremely destructive eruption accompanied the growth of a dome at Mont Pelée in 1902. The coastal town of St. Pierre, about 4 miles downslope to the south, was demolished and nearly 30,000 inhabitants were killed by an incandescent, high-velocity ash flow and associated hot gases and volcanic dust.

Only two men survived; one because he was in a poorly ventilated, dungeon-like jail cell and the other who somehow made his way safely through the burning city.

*A sketch of the havoc wrought in St. Pierre Harbor on Martinique during the eruption of Mont Pelée in 1902. —→*

**Sources: ZACK'S ROCKS & MINERALS, U.S. Geological Survey**



### *Presidents Message: Continued from page 1*

Speaking of members, I would like those of you that have any nice specimens that you are willing to donate for the mineral display at Boxley's Mt Athos Quarry, to please bring them to our March meeting. These need to be from the Mt Athos Quarry. Also if you have any nice specimens from Virginia the Club needs more to fill up the mineral cabinet at The Nature Zone. These will be on a long-term loan. I guess until they would like an update of material. All of these specimens will be enjoyed by far more people in these displays than they will be seen in a box at your home. Any help will be appreciated.

Don't forget the March meeting program will be mineral identification night. We are planning to have seven or eight members to help with identification of any rock or minerals you may have found and are having trouble getting an exact ID on them. Also we will be hosting Concord Pack 155 Scout Troop as they are working toward merit badges in geology. We will have some specimens to give to them for their collections as well as helping them with any rocks and minerals they bring in for identification. We will try to pass on some basic info to help them do ID's for themselves. You know the old saying, give a man a fish and feed him for a day, teach a man to fish and feed him for a life time. Or something like that. I hope we will have good member participation in this program; it's a good way to learn more about your hobby. I hope to see you all at the March 18th meeting. Until then,

Keep Looking Down,  
John Haskins

### DMC Program of the SFMS Field Trip Committee

**An Official Field Trip of the MEMPHIS  
ARCHAEOLOGICAL & GEOLOGICAL  
SOCIETY (HOST)**  
9:00 AM TO 2:00PM CST  
Saturday, March 28, 2009

**Memphis Stone and Gravel Company,  
Arlington, TN**  
[www.msgravel.com](http://www.msgravel.com)

**Contact:** Alan Parks  
(home phone 853-6898) (mobile 481-9730)  
Email: [alan.parks@msgravel.com](mailto:alan.parks@msgravel.com)  
Additional information at [www.memphisgeology.org](http://www.memphisgeology.org)

"Field trips are open to all members of associated clubs of the DMC program of the SFMS Field Trip Committee and to all members of SFMS member clubs who have provided their membership with SFMS liability insurance. Because of insurance requirements, members of the GENERAL PUBLIC are NOT invited on this or any DMC program field trips!"



### Executive Meeting Minutes

**Meeting:** March 4, 2009

President John Haskins spoke about doing a display at TC Miller School, The Nature Zone and Mt. Athos. There is still a need for donations of specimens: fossils, crystals and minerals for these displays. Would like specimens that are pretty and unusual.

Workshop at Dave Callahan's this Saturday to make bookends and break up rock for the sluice.

On March 18 at the monthly meeting the program will be mineral identification night. Concord Boy Scouts age 7 -10 have been invited to attend. We will present different methods of mineral identification such as hardness, cleavage, luster, streak, fluorescence, and crystal habit.

We are presently searching for a new location for our monthly workshop, materials, and equipment. If you have any ideas please speak to our executive board.

Ralph Torning addressed the issue of past due memberships, and they will be dropped from the roster and mailing list. Uncle Billy's Day was discussed briefly, and the T-Shirts ordered through Dave Callahan will be available at the club meeting this month. There will also be a map and directions available at the meeting for the field trip on March 21st. It was decided that we will have our annual auction in October, and the program for the April meeting will be a pleasant surprise- "field trip related."

**Minutes submitted by Dorothy Rivera, Secretary**

**Websites to visit:** Lynchburg Gem and Mineral Society:

[www.lynchburgrockclub.org](http://www.lynchburgrockclub.org)

The SFMS Newsletter, the Eastern Federation  
Newsletter, and the

AFMS Newsletters are available for all members  
to read on line at the Federation Websites:

[www.amfed.org/sfms](http://www.amfed.org/sfms), [www.amfed.org](http://www.amfed.org) and  
[www.amfed.org/efms](http://www.amfed.org/efms)

**Hobby Related Newsletters** are available free of  
charge by emailing the editors below. Both are great  
sources of information and worth checking out.

(Available only via email)

[rudybland@worldnet.att.net](mailto:rudybland@worldnet.att.net) (*Mineral Mouse*, editor  
Rudy Bland)

[rockhound\\_zack@yahoo.com](mailto:rockhound_zack@yahoo.com) (*Zack's Rocks and  
Minerals*, editor Zachary McKinney)



Welcome to our newest  
Member: John Monroe, of  
Charlottesville, VA

### The Gem & Mineral Society of Lynchburg, VA Inc.

Natalie Darling, Editor

211 Chesterfield Rd.

Lynchburg, VA 24502 [www.lynchburgrockclub.org](http://www.lynchburgrockclub.org)

The purpose of the  
Gem & Mineral  
Society of Lynchburg,  
INC. is to promote  
education in The  
Earth Sciences  
including: Mineralogy,  
Geology, Gemology,  
Paleontology, and  
Crystallography



Lynchburg Rock  
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**Happy St.  
Patrick's Day!**



Additional Field Trip Photographs from Diamond Hill Mine



Smithsonian Field Trip Photographs submitted by Dave Callahan, Don McIntyre, Rich McClevey & Zack McKinney

