# Presidents Message:

Hello To All,

On Memorial Day, I was thinking about the brave American's lives that were sacrificed during all the wars that America has always played a pivotal part in. We salute you, and all that have had a part in keeping our Country safe and free from all tyranny.

On a lighter note, the GMSL has had and has some amazing people that have contributed greatly to al phases of Geology, Gemology, Lapidary, Jewelry making and all kinds of collecting and identification of rocks and minerals. The Club has a great book in the library by Joe S. Worsham of Madison Heights, VA. He is a local talent that has included in his very informative book" Jewelers Illustrated Hand Book ", everything from Gold Panning, to making jewelry from A to Z. You should check it out some time, I'm sure there will be something of interest. Speaking of local talent, Dave Woolley, our esteemed Club Geologist, along with Marcus Beale, made a great contribution to the faceting world by introducing

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their idea of adding an OHM meter to a faceting machine. This enables the faceter to replicate cuts to a very close tolerance. This can transform a not so precise machine to making cuts that are comparable to machines costing many thousands of dollars. Also Dave Woolley, over the years, has been a great inspiration to many people by teaching faceting and rock & mineral identification with great patience and knowledge and always donating his time and materials. Another person that has made a great contribution to our Club is Dave Callahan. We have published articles about his building no less than six Sphere Making Machines so that the Club can create beautiful round spheres for themselves as well as spheres for selling at Festival events. He has also contributed years to the Club in several office positions, but he is known best as our 2<sup>nd</sup> Vice-

Continued on page 11

## From the First VP:

My wife Sharon and I have been back about 10 days now from a super great vacation in Nevada and Arizona. The beauty of the southwestern United States is so breathtaking that it's surreal. Yes, we flew into Las Vegas, but did very little gambling preferring to venture out into the great rocky wilderness that surrounds the city visiting Sedona, AZ, the Grand Canyon, and the Valley of Fire just north of Vegas. Sedona, AZ and the Verde Valley

have a great variety of Paleozoic age sedimentary rocks including sandstone, limestone, dolomite, and siltstone. Some of the most impressive red rock cliff formations include Cathedral Rock and Coffee Pot Rock.

The Grand Canyon is a world in itself; an enormous chasm cut out during the last few million years into rocks as old as 2 billion years.

Continued on page 11

#### 2010 ELECTED OFFICERS

John Haskins - PRESIDENT (434) 525-8430 JMHaskins1@netzero.net

> First Vice President Jack Curtin (434) 384 -6249

> jacwcurtin@gmail.com

David Callahan Second Vice President (540) 297-1853 DBCALL1@aol.com

Secretary **Brenda Glass** (434) 525 6664 glass57@netzero.net

Natalie Darling – Editor (434) 941-1899 gmsleditor@comcast.net

Frank Midkiff- Treasurer (434) 239-8329 midkifff@aol.com

> Members At Large-JoAnn Mason & Tom Powers

### COMMITTEE **CHAIR PERSONS:**

Field Trips— David Callahan Hospitality-**News Articles** – Natalie Darling Silent Auction - Warren Darling Swap for Rocks-Warren Darling Website - Casper Voogt Workshops- Dave Woolley FRA Adult Liaison-**Membership**- Ralph Torning

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

# May Meeting Minutes

Meeting: Wednesday, May 19th, 2010

Attendance: 20 members and 1 auest

Hospitality: Natalie and Warren Darling hosted this month and Bernard Rivera will be the host for the June Meeting. Thanks to all who brought something to add to the

On Time Drawing: Tom Davis, Tommy Conner, David Callahan, and Nona Haskins were all winners. Thanks to Dave Woolley and Don McIntyre for the prize donation.

**Old Business:** Goldfest 2010 in Dillwyn has been cancelled.

On May 8 we had 22 volunteers make up the sluice bags and Warren worked on 8-10 bookends. We will be having another workshop on May 22 at David Callahan's to make gem trees. There is a sign- up sheet for members to indicate the times they can come and help with Uncle Billy's Day activities. We need all the help we can get. The club will be in Altavista from 7:00-5:00. Come early to setup or stay late to take down or any time in between to work the sluice.

First Vice President: Jack Curtin was unable to attend this evening. The program will be a presentation by Mark Hodges, a Roanoke Club

Member. Mark will talk about collecting travels and experiences along the upper peninsular of Michigan along Lake Superior.

Vice Second **President:** Dave Callahan is collecting The Roanoke from Lynchburg clubs are trying to gather donations to present to Lance Kearns in support of the mineral museum at JMU. The Roanoke club has pledged \$700 and the Lynchburg club has collected \$535. Please contribute what you can to help with the endeavor.

**Upcoming Trips:** 

May 29 – American Rutile Quarry (rutile, blue quartz, feldspar)

June 19 – John Sorg – Panning demonstrations

June 26 – Contrary Creek near Louisa/Mineral, VA - only 10 cars per trip – gold and pyrite

July 24 - Cotton Patch, NC gold panning – this is a fee site Ed Blackford from the Roanoke Chapter coordinated this trip

July 29 to August 1 – Spruce Pine, NC camping trip – gem shops, specimens, field trips, and lots of fun

Continued on page 9

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!



Our June Program will be a DVD on collecting from the library of Bernard Rivera.

If you have been privileged to see any of Bernard's collected materials, you know this DVD is a must see! Hope you can join us on June 16<sup>th</sup>, 7-9PM.

\_\_\_\_\_

Our May program featured Roanoke club member Mark Hodges who shared a slide presentation and excellent commentary on Copper Mining in the upper peninsular area of Michigan on Lake Superior-1100 miles from Roanoke.

The photographs showed not only beautiful native copper, but also an abundance of edipote.

Mark visited several different sites, including a paid site where you can purchase a 3 cubic yard pile of rock to mine. The mine is only open from 9-1 for collectors, and according to Mark a good metal detector is the key to getting the most from your pile in this amount of time.

We also got to view the mine tour photographs, which were most impressive as far as mine tours go. This would not be a tour for just anyone, as the mine is considered safe, but still very primitive.

Thank You Mark for sharing your time and adventures with our club members.

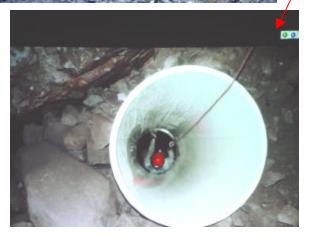
Photographs submitted by Don McIntyre



Mark gave an excellent commentary on his slide show of the area.



Access to parts of the mine are limited to confined space entry. Repelling on ropes is also required for part of the tour. Not to worry- instruction is included....









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

For further information on field trips, contact David Callahan,
540-297-1853
Email dbcall1@aol.com

### NO REPORT SUBMITTED

Up coming DMC Field Trip from the DMC Program of the SFMS Field Trip Committee

An Official Field Trip of the LOW COUNTRY GEM & MINERAL SOCIETY (Charleston, SC)(HOST)

Dig: 7:00 AM to 4:00 PM EST

Saturday – July 17, 2010

Diamond Hill Mine, Anderson County, SC

### FEE SITE

WHERE: Diamond Hill Quartz Mine (near Antreville, SC)

WHEN: Saturday – July 17, 2010

COLLECTING: Quartz crystals in numerous forms such as amethyst, smokey quartz, clear crystals, milky quartz, skeletal quartz, and quartz coated with hematite or manganese. Also some microminerals such as cacoxenite are found there. In recent years new veins of amethyst and smokey quartz were uncovered by machines.

TIME: Dig is from 7:00 am to 5:00 pm ET. You will be required to sign a waiver of liability & you must have a ticket before you can enter the mine site.

FEE: Adult fee is \$15.00, \$6.00 for children under 16 and for non-digging spouses and elderly. A filled out release of liability form will be necessary for each person attending. Some forms will be available, but you can avoid delays by going to <a href="https://www.gamineral.org/commercial-diamondhill.htm">www.gamineral.org/commercial-diamondhill.htm</a> and printing off the form found under permission procedure for private individuals. Bring the completed form and fee with you.

DIRECTIONS: Take I-85 to exit 21 (US 178/ Anderson, SC). Go south on 178 for one mile and bear right onto SC 28. Stay on SR 28 all the way to Antreville. It is 21 miles from Exit 21 to Antreville. Drive past Crawford's store on the left and turn right on SR 284 just before Emmanuel Baptist Church. Drive 2.3 miles and turn right on Suber road (S-01-508). Go 7/10 of a mile and turn right on Diamond Mine Road (gravel road). Go for 1/2 mile to the mine entrance on the right. The GA mineral web site has a map.

WHAT TO BRING: Buckets, picks, shovels, rock hammers, sledge hammers, chisels, scratching tools, sun screen, drinks, and a picnic lunch. No power equipment is allowed.

GENERAL INFORMATION: Due to the heat and humidity, the dig will start at 7:00 AM for those who are heat sensitive.

\*\*Continued on next page\*\*

Up coming DMC Field Trip Continued from page 4...

WHERE TO STAY: Anyone is welcome to camp at Diamond Hill Site on Friday evening. There is no charge for that. However, if someone arrives on Friday, and spends any time walking the property and/or picking up specimens, then that person must pay the daily collecting fee of \$15.

It is also possible that someone will want to camp at DH on Sat evening. If someone does that, then he needs to include Sunday on his liability release form. And if such person also does any collecting on Sunday, then he must pay the daily fee. For all campers there is flat space at Diamond Hill site to park a camper or erect a tent. There is an outhouse. There is no running water or electricity. Full service camping is nearby at Lakes Hartwell and Russell.

#### CONTACTS:

Field Trip Chair: Lawrence Moss, (843) 819-0726 or email: jorel611@yahoo.com

SFMS Field Trip Committee: Please reply by e-mail to: <a href="mailto:dmc@gamineral.org">dmc@gamineral.org</a>
Jim Flora - SFMS Field Trip Committee Chair, DMC Program Coordinator

### Interested in fossil collecting?

This email was sent out by Scott Duresky < <a href="mailto:svgem-min-club@live.com">svgem-min-club@live.com</a>> from the Shenandoah Club in Waynesboro, VA, and forwarded to me by several club members. Thanks to everyone who is on the look out for newsworthy information to add to our journal.

### **FOSSIL COLLECTING**

As some of you who are interested in collecting fossils have recently experienced, many of the traditional areas in Central Virginia for collecting fossils are relatively "picked over" and inaccessible. While future options available to us may include prospecting trips to new fossil collecting sites, the reality is that much of the best fossil material to be found in the Virginia-Maryland-North Carolina area involves marine fossils, many of which are available only by boat; all are some distance away from Waynesboro and would involve carpooling and/or overnight trips.

Club member Stephen White, who lives in Annandale, VA is in the process of organizing a Fall trip for us to collect shark's teeth, whale bone and other marine fossils at Flag Ponds State Park in Maryland, near the Calvert Cliffs formation; Dave Lines of the Southern Maryland Club and myself will soon be working on possible joint field trips to a number of other localities in the same region.

In the meantime, the best ongoing option would appear to be the regularly scheduled Spring, Summer and Fall fossil collecting trips sponsored by the Virginia Museum of Natural History in Martinsburg. These trips are offered for a fee and vary in expense. They are led by Dr. Ward, a Professor of Paleontology, and offer the opportunity not only to gain access to some of the more remote collecting sites, but for those interested, to actually be able to identify what they've found. Some of these trips involve boat trips, some are overnight, but all offer wonderful opportunities for those interested in growing their knowledge in the diversity of the marine fossils to be found in our area.

If you're interested, go the website for the Virginia Museum and review the trip offerings, and/or request to be placed on their mailing list. < http://www.vmnh.net/index.cfm/topic/field-trip-adventures>

Note: It's my understanding that these trips fill up quickly, so if you see something you like, sign up for it right away!

### Safety Note for Spring by Owen Martin, AFMS Safety Chair

Reprinted from AFMS Newsletter May 2010

Well it was a hard winter by most standards in the central and south and eastern U.S. It even snowed three times at our house in Houston and froze hard enough to break pipes in several houses in our neighborhood. Not that I'm complaining- after all we get PLENTY of summer for 6+ months every year. With that being said, the cold weather really backed up the spring bloom and as a result EVERYTHING started blooming last week!

So my Bradford pears, dogwood, peach and red buds are in full bloom. Weeds are taking over the hibernating grass and have tons of little flowers, my pine is pollinating and so are some oaks and maples across the street. AND to top it all off Cedar keeps blowing in from Hill Country.

Now the weather was just perfect this weekend so I figured it was time to get our and at least do some yard word- about 8 hours worth. This was after a land-clearing project in Hill Country from the previous weekend. As a result proximity and increased respiratory activity I did myself in. All those allergens caught up with me and just about knocked me out. It wasn't exactly an asthma attack, but my eyes were swollen, my nasal passages were swollen up so that I couldn't breathe except out of my mouth, and I kept coughing up crud!

OK- so the moral of the story is that I should have taken Benadryl prior to engaging in such activities. Not to say that I wouldn't have had some impact from all that pollen, but at least I could have mitigated the violent response my body had to it all. Luckily I was able to nurse my bloated head on the couch while watching conference basketball tournaments.

However if I was in the field and had such a problem, especially one that could have led to an asthma attack, then I would have been in trouble. Keep that in mind as you head on your first hunt of this spring.

Prepare, be safe and breathe easy!!!



### **Fulgurites**

By Joyce Smith, assistant curator, By way of September 2004 Breccia, Newsletter of the Santa Clara Valley Gem and Mineral Society

When looking up information on Fulgarites, you might find some conflicting opinions. There are even two different spellings for the specimens (Fulgarite-Fulgurite). Some mineralogists place fulgarites in the quartz group, while others consider it a mineraloid called Lechatelierite, because it lacks a crystal structure.

It is actually made of fused silica, which is the substance that makes up Quartz. However, it differs from regular quartz by virtue of its natural origins: Meteorite impacts or sandy beaches, the intense heat and energy of the bolt will fuse the sand grains in a milli-second. A branching hollow, glassy tube is sometimes the result. The "fossil" lightning strikes are composed of Lechatelierite and occasionally fused biotite or other minerals. They are referred to as fulgarites and are certainly a natural history oddity. Fulgarites have been found that were several feet in length, although most are a few inches long by half an inch thick.

## Geology Concepts Part V

Dave Woolley, Geologist

The **illites** are the dominant clays of sediments, mudstone, shale, and limestone formed by the weathering of fine grained feldspar and mica *sediments*, generally in alkaline (limestone forming) marine environments, or the recrystallization of colloid sediments, for example: glauconite. The weathering of potassium aluminum silicate sediments such as the orthoclase feldspars and the alkali-mica, muscovite, yields the illites. The clay-mineral illite was named by the Illinois Geologic Survey in honor of their state. Illites are found in the expanding shales of Valley and Ridge Province.

Glauconite is found in "greensands" and other sediments of the Coastal Plain Province.

The **smectites** are widely found, often mixed with illites; they also form from sediments in alkaline conditions, plus from the acidic weathering of "basaltic" rock like basalt, gabbro, and diabase. High magnesium and calcium silicate minerals lacking potassium, like the pyroxenes, yield the smectites. Poor drainage is necessary for the smectites:

if magnesium is leached, kaolinite is formed instead. Smectite is from the Greek word "smektikos" meaning to cleanse, a reference to its soapy feeling. Montmorillonite of the smectite group typically forms by the weathering of poorly drained volcanic ash and certain diabase. Montmorillonite, the chief mineral of the volcanic clay, bentonite, is the most absorptive and expansive clay known. Montmorillonite was named after Montmorillon, a town in west-central France. Illite and especially smectite-rich materials tend to be problematic for construction. Watch especially for volcanic ash beds in the limestones of the Valley and Ridge, rare metamorphosed ash beds in the Catoctin formation of the Blue Ridge, and poorly drained diabase dikes in the Piedmont Provinces.

The **palygorskite** group of minerals is rare. The mineral palygorskite is sometimes found within breccia and along mylonite of faulted dolostone. Palygorskite was named after Palygorskaya, Russia. Palygorskite is found in the Lone Jack Quarry near Glasgow, VA.

**Vermiculite** forms primarily from the weathering of biotite, a common black-colored iron-bearing mica; at the contact of granitic and basaltic rocks; plus from the chlorite and hornblende of basaltic volcanic material in marine environments. Vermiculare is the Latin word meaning "to breed worms": vermiculite particles expand when heated looking like worms; particles act like compressed springs. Vermiculite is responsible for "elastic" clay, silt, and sand because *clay minerals may occur in larger-than-clay-sized-particles*. Piedmont and Blue Ridge Province footings to be placed in excavations within vermiculite-rich soil derived from gneiss and schist containing biotite, find bearing-capacities *diminishing* as vermiculite particles bound upwards.



### Sunshine News

Dee Tinley was recently involved in a car accident on her way home from Kentucky. Jean Midkiff is nursing a bad knee, and Franklin Midkiff continues to battle chronic vertigo issues. Please keep these members in your thoughts and prayers.

### **Welcome New Members:**

Mark, Noreen, Josiah, and Uriah Goodman from Gladstone, VA

# Up Coming Events

### **Shows and Trips**

June 12<sup>th</sup>- Rudy's Yard Sale of all Sorts-8:00 am until 2:00 PM. See page 9 for details.

<u>June 13<sup>th</sup>-</u> Region IV Annual Picnic and Rock Swap at the Lake Anna State Park. Details on page 10.

<u>June 26<sup>th</sup>-27<sup>th</sup>-</u> Nittany Gem & Mineral Show sponsored by the Nittany Mineralogical Society. Mt. Nittany Middle School, State College, PA

July 2<sup>nd</sup>-4<sup>th</sup>- 23rd Annual Fishersville/ Waynesboro Area Gem, Mineral & Jewelry Show(Formerly in Waynesboro, VA). Now at Augsta Expo Land. <www.toteshows.com> for complete details and directions.

July 29<sup>th</sup>-Aug 1<sup>st</sup>- Annual club field trip to Spruce Pine, NC. Details at the meeting and in next months newsletter.

<u>September 6<sup>th</sup> -12<sup>th</sup>-</u> Fall Session of Eastern Federation Wildacres Lapidary workshops. Please visit the EFMLS website <u>www.amfed.org/efmls</u> for complete details and application.

IMPORTANT: All newsletter submissions are due by the 1st of each month. This does not leave much time for production. Your on time or early submissions are greatly appreciated.

# Jane 2010

Sun	Mon	Tues	Wed	Thurs	Fri	Sat
		1	2	3	4	5
6	7	' 8	9	10	11	12 Yard Sale
13 Region IV Picnic	14	15	16 Meeting 7PM	17	18	19
20 Fathers Day	21	22	23 Woolley's Workshop	24	25	26
27	' 28	29	30	28	29	30

### **Places to Visit**

Since the weather can be quite warm this time of the year, it may be nice to do some inside collecting. There are several shows during the summer months, but open most days for public visiting and collecting are our local rock shops.

STONES N BONES- Rocks, minerals, jewelry and beading supplies. Located in the Graves Mill Shopping Center in Forest, VA. Open Mon-Fri 10-6; Sat. 10-4

EASTER ISLAND-<u>www.easterisland-va.com</u> Rocks specimens, posters, custom jewelry and more. Located on White Oak Dr, just behind the Long John Silvers on Wards Road, Lynchburg, VA.

**THE ROCK GARDEN-** Located at 121 Great Oak Dr. in Madison Heights, VA. Mineral specimens and Jewelry.

VA ROCK SHOP 233 Hydraulic Ridge Road, Suite 203 Charlottesville, Virginia. Please visit the website for hours of operation or to preview merchandise. They also offer online shopping. <a href="https://www.varockshop.com">www.varockshop.com</a>>

### RUDY'S BLAND'S YARD SALE OF-ALL-SORTS

On Saturday, June 12th from 8:00 A.M. to 2:00 P.M. Rudy will be having a very special and most unusual yard sale at his home in Richmond

He hasn't done one of these for many years, if ever, and among other things will feature:

Minerals and Lapidary Items, including flats of minerals ranging from \$5 to \$30, with lots of special buys

Fossils
Avon collectables
HO Train Items
1940's Desk
Garden Rocks
Many Unusual Items!

Note: This event will be held rain or shine. Once again, car-pooling is encouraged. This will be a very special opportunity to attend a most unusual yard sale, and to meet one of my favorite people in the hobby.

#### **DIRECTIONS**

Take I-64 East towards Richmond At Exit 183, turn right towards U.S. 250/Broad St./Glenside Dr

Keep left to stay on ramp towards U.S. 250/Broad St. Turn right for 0.2 miles towards U.S. 250/Broad St., then bear right onto U.S. 250(W. Broad St.) for 0.9 miles

Turn left onto N. Crestwood Ave. for 0.2 miles Rudy's address is 5904 N. Crestwood Ave., Richmond, VA 23230

Note: Rudy is thin, with close-cropped red hair and in his early 60's; when you see him, tell him that Scott says hello!

Submitted by Scott Duresky, Field Trip Coordinator, Shenandoah Valley Gem and Mineral Society

# May Meeting Minutes continued from page 2

**Treasurers Report:** Franklin Midkiff was unable to attend, so Dave Woolley gave the report. Treasury balance: \$3152.11

### **New Business:**

Quarries – All quarries are under the same regulations and the regulations are changing to be tighter on safety rules. This is hitting Boxley and Vulcan hard. Some quarries may not be willing to have us come back due to these changes. Hopefully we will still be able to visit some private quarries. The silent auction was held for those in attendance.

Minutes submitted by Brenda Glass, Secretary



### Tip for Working Jasper

You will find that jasper is much more troublesome to polish than agate because many varieties are "earthy" and porous, and many others contain hematite, which is very difficult to polish. If you are on a field trip, a good way to test the jasper is to wet it. If it absorbs the water and dries rapidly, throw it away. It will not polish. If it stays wet and does not dry right away, it contains a high amount of chalcedony (quartz) and will take good polish.

By way of September 2004 Breccia, newsletter of the Santa Clara Valley Gem and Mineral Society Date: Sunday, June 13, 2010

Time: 10:00-4:00

# <u>NEW DAY!!! – SUNDAY</u>

Region IV Annual Picnic & Swap
Lake Anna State Park 

Shelter #1



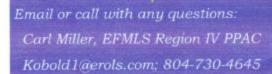




### Don't Forget:

- Your lawn chair!
- A dish to share!
- Swap materials!
- Auction or door prize items!
- Surplus hobby related items to give away in the Region IV Treasure Box!

Directions: I-95 to exit #118 Thornburg;
West on Rte 606 to Rte 208; Turn left onto Rte
208; Continue to Rte 601 and turn right onto
Rte 601 (turn is just past Lake Anna Marine
Supplies & Hardware); Continue on Rte 601
then turn left into Park; follow park road to
lake, shelter is around to the left past the
park facilities.





Highlights: Mineral & Fossil
Swapping, the famous Region
IV Treasure Box, and a GREAT
Picnic Pot Luck Lunch.

10:00AM – Swapping begins early, so arrive early for the best swapping!!!
Don't forget ~ no selling allowed in park.

12:00PM- Picnic Lunch! Hotdogs & Hamburgers will be provided. Please bring a dish to share and your own drinks.

**2:00PM**– A fun Auction – please donate items for the auction. Donations should be at least somewhat hobby related.

**Door Prizes**— Please bring one to donateeveryone loves to win so the more donations, the more winners!

# Presidents Message: continued from pg. 1

President in charge of field trips. Next time you see him thank him for taking the time for showing us around to so many great collecting sites. The list goes on and on, I know I will leave out some one that has made contributions to our Club over the years. Like Natalie Darling, our wonderful News Letter Editor, she has also become a fine jewelry maker, taking the time along the way to help others become accomplished in jewelry making. Did you know that four of our past Presidents have opened Rock and Jewelry shops in the Lynchburg area? Dave Lipscomb is a dealer in rocks and minerals, Tony Faller has the Rock Garden in Madison Heights, VA, and Dave Young is owner of Stones & Bones in the Graves Mill Shopping Center in Forest, VA. He not only buys items to stock his store but also still collects in many states to bring specimens for sale to customers. And last but not least, Luis Gonzalez, the First President to reorganize the GMSL. Luis is the owner of Easter Island, a shop where you can find an assortment of rocks, minerals, gems and finished jewelry. If you go to see any of these guys they are willing to give advice, answer questions, and help with making or finishing a piece.

I am sure that there are many Club members I did not mention that have made far-reaching contributions to our goals, so I want to thank each and everyone, and hope that there will be more to come in the future. You never know what you say or do that may inspire someone for a lifetime.

I hope to see you all at the June 16<sup>th</sup> meeting.

Keep Looking Down, John Haskins



# From the First VP: continued from pg. 1

There are nearly 40 major sedimentary rock layers exposed in the Grand Canyon and in the

Grand Canyon National Park area. Most were deposited in warm, shallow seas and near ancient, long-gone seashores in western North America.

Both marine and terrestrial sediments are represented, including fossilized sand dunes from an extinct desert. There are at least 14 known unconformities in the geologic record found in the Grand Canyon and the surrounding area.

Valley of Fire is a Nevada state park and amazingly enough was our favorite visit. The valley derives its name from the red, orange, and yellow sandstone formations and the stark beauty of the Mohave Desert. Ancient trees and early man are represented throughout the park by areas of petrified wood and 3,000 year old Indian petroglyphs. The multi-shaded red and golden sandstone cliffs and rocks in the Valley of Fire are part of the Navajo Sandstone Formation that is found throughout southern Nevada and many areas of the southwestern United States.

The western regions of the park are easily remembered for their beautiful limestone hoodoos and narrow canyons.

If interested in some of the rocks collected out there, they will be available at our next meeting.

Bill Livingston generously lent us some DVDs with some neat geology lectures for the program part of our next meeting. Our scheduled speaker for the evening is doing census work and will be available in August or September.

Happy hunting, Jack

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

Natalie Darling, Editor 211 Chesterfield Rd. Lynchburg, VA 24502 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 Raiders is the official FRA association of The Gem & Mineral Society of Lynchburg, VA INC



Happy Fathers Day June 20th



**Websites to visit:** <u>www.digforcrystals.com</u> this website offers field trip information and digging opportunities at the Hogg Mine in Lagrange, GA

www.lynchburgrockclub.org Lynchburg Gem and Mineral Society

<u>www.amfed.org/sfms</u>, <u>www.amfed.org</u> and <u>www.amfed.org/efmls</u> - these are the federation websites, great resources for all of the Eastern, American, and Southeast federation information.

**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 (Mineral Mouse, editor Rudy Bland) rockhound\_zack@yahoo.com (Zack's Rocks and Minerals, editor Zachary McKinney)







