

# GEM & MINERAL JOURNAL

Official Monthly  
Publication of the Gem &  
Mineral Society of  
Lynchburg, VA, Inc

[WWW.LYNCHBURGROCKCLUB.ORG](http://WWW.LYNCHBURGROCKCLUB.ORG)

FEBRUARY 2014 VOLUME 23~ ISSUE 2

## Presidents Message:

Hello To All,

How about this January weather? I guess it's fine if you are an Eskimo. I hope the temperature will soon get back to normal for VA. It makes it hard to go on field trips when everything is frozen to the ground.

Have you thought about a trip to a Cavern? Maybe Dixie Caverns, Natural Bridge Cavern, Grand Cavern or some other farther up the valley? They stay the same temperature year around you know. Nona & I took a trip to Weyers Cave not long ago, and it was nice to see some different cave formations as well as some Civil War signatures on the walls. Several of the Club members went to the Natural History Museum of VA in Martinsville last month, and then went on to Fairy Stone Park in the afternoon for collecting. Everyone had a great time and found a few specimens for our collections as well as some to share. Please sign up for the trip to J.M.U.

## From The First VP:

So far we have made it through January and have gotten a good grip on the new year before us. We have an exciting topic for this month's meeting - a talk on meteorites presented by Natalie's contact Dave Vanaman who has his own private collection. Perhaps there will be some discussion of precious metals and the possibility of mining meteorites in order to recover some of them.

Valentine's Day is just around the corner and we men better be about choosing some endearing gifts

Geology lab and museum, February 15<sup>th</sup>, in Harrisonburg, VA. This is always a great experience and we usually find a collecting site in the afternoon, weather permitting.

I want to invite members to the second Saturday of the month Club workshop at Dave Callahan's. I hope to get started on making agate slab jewelry boxes. It looks like fun as well as a new item to sell at the upcoming festivals. So come out and join in the fun, it's too cold to do anything else.

Noel Woolley will have a short mineral of the month presentation on Turquoise at the February 19<sup>th</sup> Club meeting. I would like to thank Brenda Finch for her presentation on Quartz at the January meeting. I learn something new from each one of the presenters, and I hope more members will sign up for future meetings.

That's all for now, stay warm, and I hope to see you at the February 19<sup>th</sup> meeting.

Keep Looking Down,  
John Haskins

for our womenfolk, right? They surly wouldn't be interested in those rare earth metals found in meteors, precious as they may be. For sure they'll be salivating for brightly colored gleaming gem stones adorning rings, bracelets, necklaces, and earrings. So how about a short tutorial about gemstones to get us started on our selections? The following article was written by Judy Ann Olsen who is a GemstoneGuru.

Article begins on page 18.



## January Meeting Minutes

**Meeting-**Wed. January 15, 2014  
@ 7:00 PM

**Attendance-** 33 members

**Host-** Frank and Jean Midkiff were the hosts for this meeting, and Noel Woolley will host the February meeting.

**On Time Drawing-**Winners were: Cindy Shields, Brenda Finch, Jack Curtin, Paul Peter Coviello, Josh Baroch, Thom Noble, Warren Darling, Nona Haskins, Tony Shields, Erin Soward, David Vananum, Jennifer Golston, Joe Scavens, Frank Midkiff and Steve Gordon.

Dave Callahan won the 50/50 drawing.

**New Business-** John Haskins: Don McIntyre swore in new officers

President – John Haskins

First Vice-President – Jack Curtin

Second Vice-President – Dave Callahan

Editor – Natalie Darling

Treasurer – Frank Midkiff

Secretary – Linda Noble

Members At Large – Bernardino Rivera and Dave Woolley

John talked about an email from Dee Tinsley regarding the Nelson County Folk Festival May 17<sup>th</sup> -18<sup>th</sup>

and wanted club members to be considering whether club should participate? More discussion to come. Siglinde suggested a fieldtrip by bus to the Smithsonian in Washington DC– it was decided there could be a poll to see if enough club members would be interested.

**First V.P.-** Jack Curtin: Program: Brenda Finch gave a nice presentation on Quartz, and Jack Curtin presented “How to organize rock collections,” and enlisted the help of club members to share ways they organize their own collections.

**Second V.P.-** Dave Callahan: Field Trips: 1/18: VA Museum of Natural History in Martinsville; 2/15: JUM; Sometime in March we will visit Rockfab, more info to come.

**Treasurers Report-** Balance at this time \$7,407.83

Minutes submitted by

*Linda Noble, Secretary.*

**PLEASE NOTE EMAIL  
ADDRESS CHANGE FOR OUR  
TREASURER  
FRANKLIN MIDKIFF.**

midkiffsm@gmail.com

### 2013 ELECTED OFFICERS

**PRESIDENT - John Haskins**  
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**Members At Large-**

Bernardino Rivera &

Dave Woolley

### COMMITTEE

#### CHAIR PERSONS:

**Field Trips-** David Callahan

**Hospitality-** Monthly Volunteers

**News Articles-** Natalie Darling

**Silent Auction-** Warren Darling

**Swap for Rocks-** Warren Darling

**Website-** Casper Voogt

**Workshops-** Dave Callahan

**FRA Adult Liaison-** OPEN

**Membership-** Thom Noble



## PROGRAMS

For our **January Program**, Jack Curtin led a discussion on “Organizing Your Collection.” Other members also added to the discussion. Hopefully everyone found a thing or two that they can use to enhance their collections in the New Year.

**February Program:** Meteorites with Dave Vanaman.

You won't want to miss this opportunity to see and lay hands on these very special “rocks.” For a preview, see Dave's article on page 13.

### **Bench Tips by Brad Smith**

More Bench Tips by Brad Smith are at:  
[groups.yahoo.com/group/Bench Tips/](http://groups.yahoo.com/group/Bench%20Tips/)  
or [facebook.com/Bench Tips](http://facebook.com/Bench%20Tips)

#### **MODIFYING PLIERS**

Sometimes a few changes to your tools can significantly improve productivity and quality at the same time. Stock tools can be customized and improved using standard jewelry skills. Here's an example:

Making jump rings and weaving them into chain maile designs involves a lot of opening and closing of the rings. I typically use two square jaw pliers to do this, one for each hand. But sometimes the rings would slip out of the pliers, getting scratched, and requiring extra cleanup time.

I solved the problem by forming a groove at the end of the jaw that would grasp the ring gently without scratching it. Use a triangular file or cutoff disk to cut the grooves about 1.5 mm back from the tip. Then to make the grooves round so they grasp the wire without distorting it, close the jaws and run a drill through the opening formed by the two rough grooves. Start with a small drill and follow up with a drill just slightly smaller than the wire size you want to grip. In my case that was 14 gauge wire, so I chose a #53 drill. Finally, polish the grooves with a rubberized disk.

More pictures and details, if needed, are available in the bench tips book.

#### **MANAGING PRODUCTION**

Many readers of these BenchTips sell their jewelry at shows, in galleries or online. They are sole proprietors and constantly under pressure to design new pieces and make enough product to keep up with demand. So their options are few when a large order comes in. They can burn the midnight oil themselves, or they can be smart and get some temporary help. But you need good help, and you often need it fast.

Jewelry assemblers are skilled, trustworthy and reliable craftsmen who make it their business to help others handle overloads and meet deadlines. Flexible arrangements are possible, working by the job, by the hour or by the piece. Each has a different mix of skills, from fabrication to enameling, casting, stone setting, lapidary and others.

Assemblers are known to the trade, so you may have to ask around to find some references. But some assemblers advertise on the Net. For instance, a good friend of mine, Janice Metz <[JenFT4@aol.com](mailto:JenFT4@aol.com)>, has been working with designers and fabricators in the West Los Angeles area since 1997. She specializes in silversmithing, wire-wrapping, beading and stringing.

*FIELD TRIP REPORT...*

**2<sup>nd</sup> VP Report**

**Virginia Museum of Natural History  
And  
Patrick Country Fairy stone collecting  
Martinsville, VA. ~ January 18. 2014**

**Contact  
Information  
for Field Trips**  
**David Callahan,  
Field Trip Chairman**  
**Home phone: 540-297-1853**  
**Cell Phone- 540-874-5201**  
**E-mail [dbcall1@aol.com](mailto:dbcall1@aol.com)**

It was mighty cold and windy this Saturday morning but we had a fairly good crowd of 17 showed up representing both clubs. It was nice and toasty warm inside the museum and we were the only ones there until about 11 o'clock. There is a lot to see there especially if you are interested in fossils and dinosaurs. We were a little disappointed in the rock and mineral display but the very large six foot diameter fossil stromatolite from the Blue Ridge Quarry was attractively displayed in the middle of the room. This was very meaningful for many of our members because we were at the quarry only a couple of days after these magnificent discoveries were stumbled upon after a blast had exposed them deep within the quarry. We saw many more in sauté (still in place in the rock) and several of us were able to collect smaller ones for our own collection.



We departed at noon, ate lunch at a neighboring Subway and several of us continued on in search of fairy stones in nearby Patrick County. It was bitterly cold and windy so most didn't stay very long. I scratched around for a couple of hours and found a baggie full of suspected crystals. I was not able to determine if I had any decent crystals until I was able to wash them when I returned home. Most were poorly formed or just small rocks but I was able to collect perhaps a dozen typical 60 degree twin crystal and several singles. Collecting is much better when the conditions are dry and not so cold. I think everyone had an enjoyable time and this is a very interesting museum to visit. You can actually watch the cleaning and assembly process for the dinosaur bones. There are many interesting educational displays there so it would be a worthy visit for the young and old alike.



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*Photos submitted by:  
Dave Callahan  
and Linda Noble.*

FIELD TRIP  
REPORT...

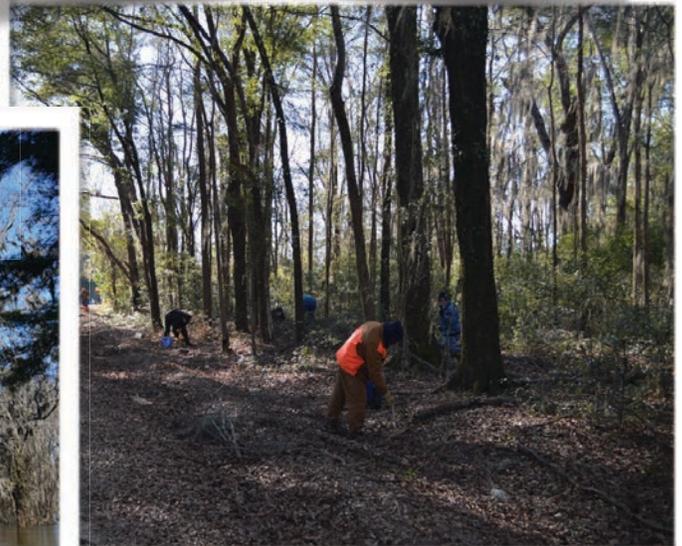


Saturday, January 18, 2014  
Stoney Bluff near Girard, GA  
“Savannah River Agate”

*Report and photos submitted by Cindy Douglass*

It was quite chilly and windy on Saturday, January 18 at Stoney Bluff. Also, the Savannah River was flooding, so we were unable to get to the actual

bluff. I'm not sure how many were there, but it was quite a few, in spite of the weather! I cannot remember the field trip leader's name - I believe it was Jim. He was awesome! Very specific, and brought samples of what to look for, and what it would look like tumbled. Bill and I enjoyed ourselves greatly, and made many new acquaintances, especially Dewitt Shank.



UP COMING



FIELD TRIPS...

Sign-up required for  
ALL FIELD TRIPS...call me, e-mail  
me or see me at the meeting

### February Field Trip

**OFFICIAL COMBINED GMSL and RVMGS FIELD TRIP**

**SATURDAY, FEBRUARY 15, 2014 (weather permitting)**

**9AM until NOON**

**JAMES MADISON UNIVERSITY, Harrisonburg, Virginia**

**GEOLOGY DEPARTMENT and MINERAL MUSEUM**

We may have to limit the attendance due to the size of the facilities.

We will all provide our own transportation and park in the JMU parking lot in the front of the new facility, Memorial Hall (The old High School). Plan to arrive between 8:45 to 9AM. See the directions below and walk directly to the Geology Lab. If you need transportation or any other information, please call or e-mail me for assistance. This is Dr. Kearns only available date. If the weather is bad, use your own best judgment before driving.

JMU has a fully equipped geology lab with state of the art equipment. Dr. Kearns is well known in his profession and has generously allowed us to visit his lab, museum and dedicate this Saturday morning to our clubs.

If you have any minerals that you need to identify, bring them along. We should have time to run five or six specimens thru the x-ray diffraction equipment. There will be microscopes available and other equipment for testing and viewing. Dr. Kearns also has a large fluorescent mineral collection for our viewing pleasure. Dr. Kearns may have some surplus mineral books, specimens, miniatures and micros for sale to benefit the museum, be sure to bring cash or your checkbook. This material will be first class and all the proceeds go toward future museum purchases. The museum will be open for our viewing pleasure.

**NORTH BOUND ON I-81 DRIVING  
DIRECTIONS TO JMU HARRISONBURG, VA.**

\* I-81 to Harrisonburg, VA. (About 2.5 hours driving time from Lynchburg and 1.5 from Roanoke).

\* Exit 245 (Turn left on Port Republic Road)

\* Proceed to S. Main Street (Rt. 11) and turn right at the light.

\* Proceed northward on S. Main Street to the third traffic light and turn left on to Cantrell Ave.

\* Proceed over the bridge to the traffic light on South High Street (RT. 42).

\* Memorial Hall (the old Harrisonburg High School) is directly in front of you. Go straight into the

parking lot on your left. Try to arrive between 8:45 and 9:00 AM.

\* To enter the Geology Department, walk around the building to the left (Grace Street Side)

*continued on next page*

UP COMING



**JMU Field Trip...continued from page 6**

\* When you enter the building, go down the flight of stairs on your left. Enter the double doors and you are in the Geology Department. Walk around to your left and follow the hall. The mineralogy lab will be open on your right.

\* The new Mineral Museum will be open so be sure to spend some time here. As you enter the building, turn right and walk to the end of the hall. The Museum is on your right. Notice the brass plaque on the Virginia mineral collection cabinet. The Gem and Mineral Society of Lynchburg Inc. and The Roanoke Valley Mineral & Gem Society, Inc.

**March Field Trip Possibilities**

Mineral collecting field trip....March 22, 2014

I am still waiting on permission from the land owner. Details will be in the March newsletter. Reserve this date if you are interested in attending. Attendance will be limited due to restricted parking at this site. Sign up is required, carpooling is recommended.

Stone Fabricator, Roanoke area field trip.....March 29, 2014

Details are being worked out and we should have confirmation for announcement in the March newsletter. Reserve this date if you are interested in attending. Attendance is not limited. Sign up is required.



**Dixie Mineral Council Field Trips**  
The Southeast Federation of Mineralogical Societies, Inc

The Friendly Federation -  
Founded in 1976 to serve.

DMC Program of the SFMS Field Trip Committee  
- Copyright © All rights reserve



**DMC Program of the SFMS Field Trip Committee**  
**An Official Field Trip of the Memphis Archaeological and Geological Society (HOST)**  
**An Official Field Trip of the GMSL and RVMGS**

**(This is a go-on-your-own trip. Please let me know if you will be attending, See my email at the bottom)**

9:00 AM TO 3:00PM(CST)  
Saturday, March 29 , 2014  
Sugar Creek near Millington, TN

*Continued on page 17*

Upcoming Events

February 2014

**March 15-16-** Annual Gem, Mineral Fossil show Montgomery Co. Fairgrounds, Building 6; 16 Chestnut St. Gaithersburg, MD.

**March 22-23-** Che Hanna Rock and Mineral Club Show, Athens twp.. Volunteer Fire Hall, Sayre, PA.

**March 28-29-** Annual Unifour Gem, Mineral Bead Fossil & Jewelry show sponsored by Catawba Valley Gem & Mineral Club. Hickory Metro Convention Center, I-40, Exit 125, Hickory, NC

**March 29-30-** Philadelphia Mineral Treasures & Fossil Fair and EFMLS Annual Convention. LuLu Temple, 5140 Butler Pike, Plymouth Meeting PA. **EFMLS Annual Meeting: Friday, March 28.**

**April 11-13, 2014-** NYNJ Mineral and Fossil Show - 300+ dealers. <http://www.the-vug.com>

SUN	MON	TUES	WED	THURS	FRI	SAT
						1
2	3	4	5	6	7	8 workshop
9	10	11	12	13	14 	15 Field Trip
16	17	18	19 Meeting 7-9	20	21	22
23	24	25	26	27	28	



**ATTENTION ALL CLUB MEMBERS**

Workshops will be held regularly on the second Saturday of each month at Dave Callahan's. Start time is 9:00 AM, but come anytime and stay as long as you'd like. There is a store/deli about a mile down the road if you want to break for lunch and return.

The workshops will be open format, and the purpose will be for club members to learn how to use the lapidary equipment to turn rough specimens into finished lapidary pieces for their own personal use. Experienced members will be available to help teach and assist.

We have a great set up with several sets of wheels for cabbing, faceting machines, saws, and much much more. From time to time there may be special class offerings, so be sure to let us know what you are interested in.

**Workshops are open to club members only, and due to liability we can not allow guests or non-members at our club workshops.** Remember, membership is just \$15.00 per year for the fist family member and \$3.00 for each additional family member.

**PLEASE NOTE...**

**NEW WEBSITE**

**ADDRESS:**

<http://www.amfed.org/sfms/dmc/dmc.htm>

**NEW DMC EMAIL**

**ADDRESS:**

[sfms-dmc@amfed.org](mailto:sfms-dmc@amfed.org)

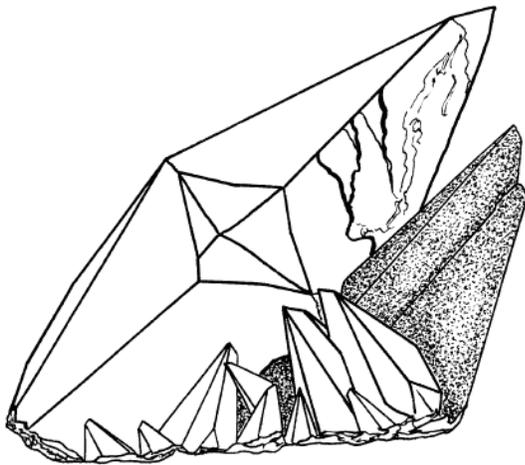
# C is FOR . . .

## . . . Calcite

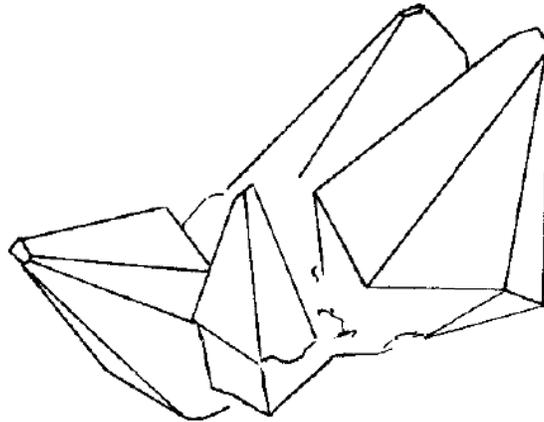
Calcite can be found in many shapes and many colors. These calcite crystals to the right are golden brown, but calcite can also be green, blue, red, yellow, black, tan, white, and colorless. Calcite is used to make cement, fertilizers and some special chemicals.



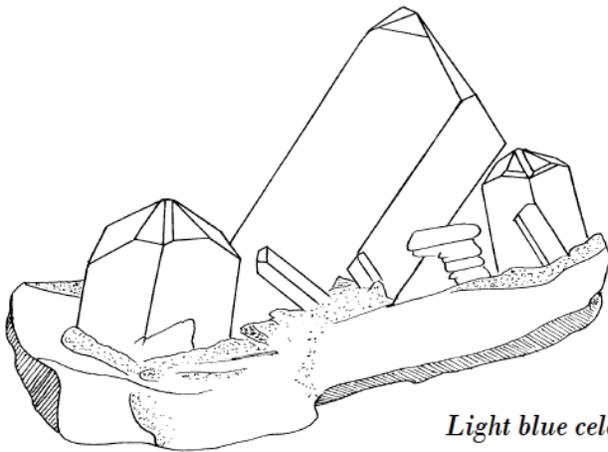
*Calcite with copper inside from Michigan.*



*Gray calcite from Missouri*



*"Dogtooth" calcite crystals from Oklahoma. They are called "dogtooth" because they look a little like a dog's fangs!*



*Light blue celestite crystals from Madagascar.*

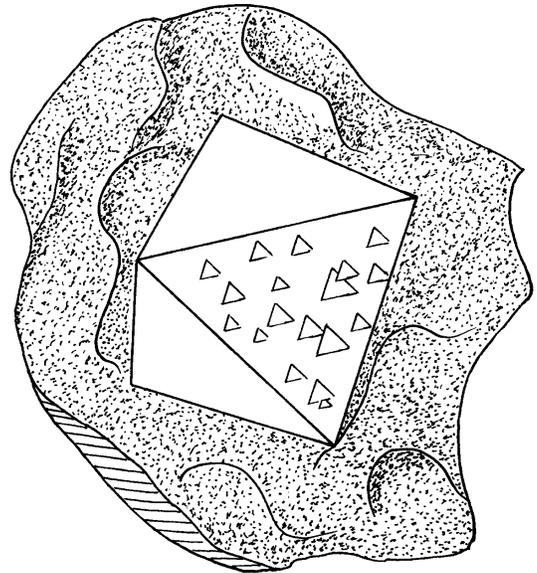
## . . . Celestite

Celestite has an element in it called *strontium*. Strontium is used in fireworks to make a pretty, bright red color. However, celestite itself is light blue, yellow, white or colorless.

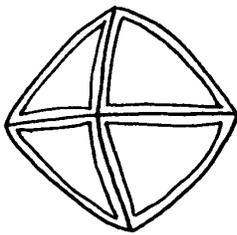
# D is FOR . . .

## . . . Diamond

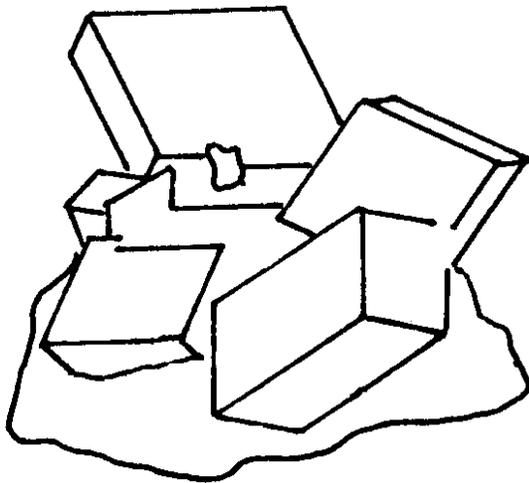
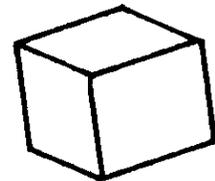
Clear diamonds are very valuable and are cut for jewelry. Most gem diamonds are colorless, but “fancy” diamonds are blue, yellow, green, and rarely, red. The diamond is the hardest substance on earth! Diamonds that are not clear enough to be gems are used in drills and saws to cut through rock.



*A diamond crystal from South Africa. It is sitting in a type of rock called “blue rock.”*



*To the left is a diamond crystal with rounded faces from South Africa. To the right is a box-shaped diamond crystal called a cube.*



## . . . Dolomite

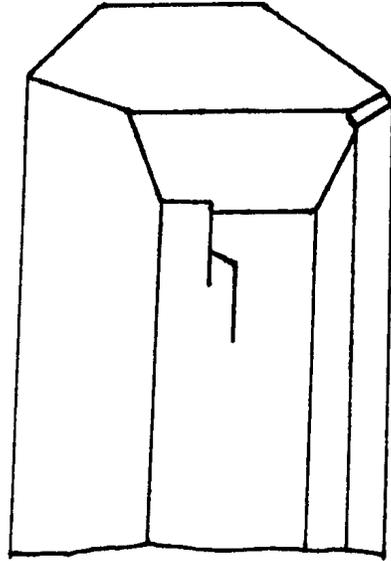
Dolomite crystals look like boxes that have been squashed to the side. These crystals are called *rhombohedra*. Usually, dolomite is white, but it can also be pink, brown, or yellow. It is used in the process of making steel from iron ore.

*Dolomite crystals from New York.*

# E is FOR . . .

## . . . Epidote

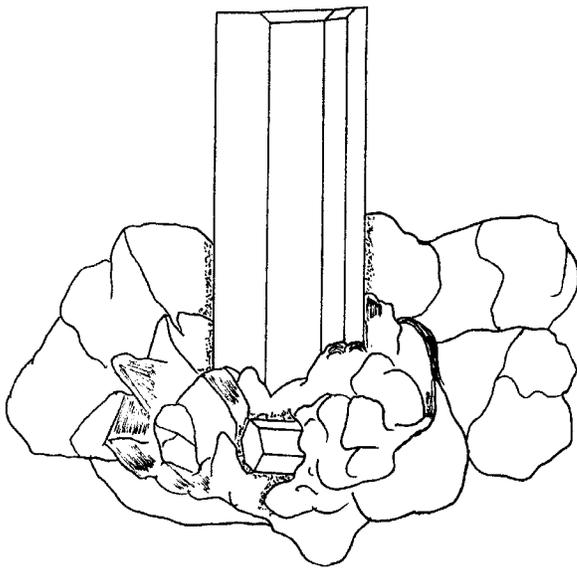
Epidote is a beautiful, dark green, glassy mineral. Sometimes it is used for making jewelry. When a mineral looks like glass, it has a *glassy luster*. Other minerals, like pyrite or gold, look like metal and are said to have a *metallic luster*.



*A single epidote crystal from Alaska.*

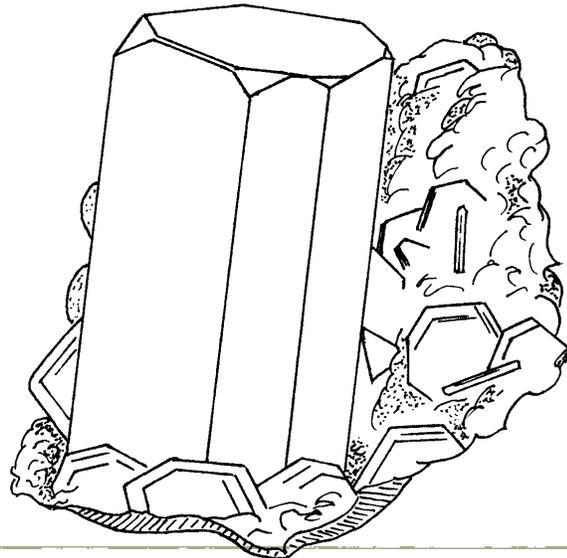
## . . . EMERALD

Emerald is the green variety of the mineral *beryl*. It is a very popular and beautiful gemstone. High quality emeralds are more valuable than diamonds!



*(Above) A dark green emerald on gray calcite from the Cosquez Mine, Colombia, South America.*

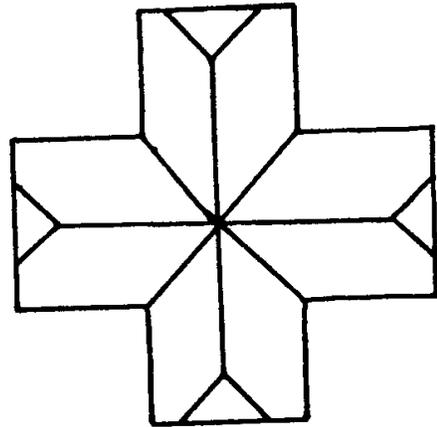
*(Right) A light green emerald on tan mica from Russia.*



# F is FOR . . .

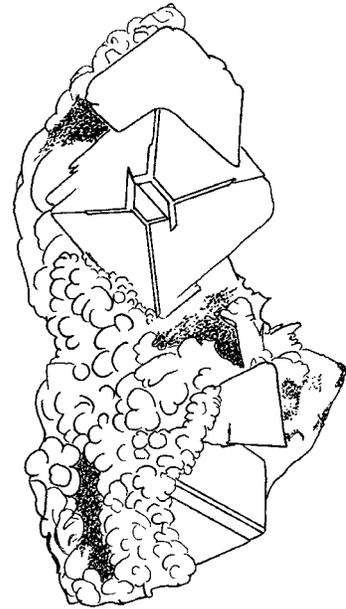
## . . . FAIRY STONE

“Fairy Stone” is a popular name for a mineral called *staurolite*. Staurolite crystals often form crosses (the name *staurolite* comes from the Greek word *stauros* which means *a cross*.) Staurolite is dark brown.

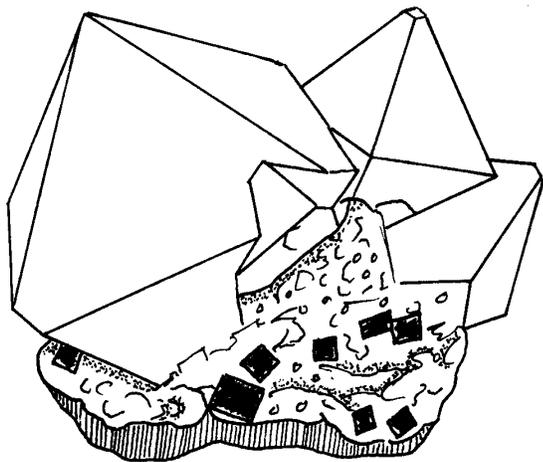


## . . . FLUORITE

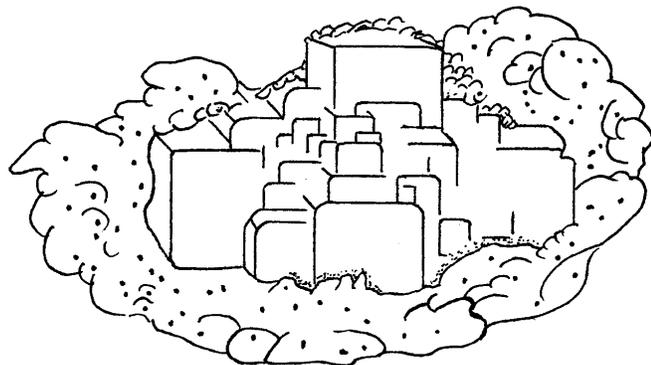
Fluorite is a favorite mineral with collectors for a number of reasons. Its beautiful crystals are found in many colors: yellow, blue, purple, colorless, pink, brown, and green. It also forms very nice crystals, both cubes and diamond-shaped. Fluorite contains the element called *fluorine* which is used in toothpaste to make your teeth strong.



*Apple-green fluorite on pink rhodochrosite from Colorado.*



*Pink fluorite from Peru.*



*Purple fluorite from Mexico.*

## Meteorites

*Submitted by Dave Vanaman*

It is thought that meteorites are pieces of various rocky material left over from the formation of our solar system 4.6 billion years ago. The main source of meteorites is believed to be, the 180 million mile wide asteroid belt located between the orbit of Mars and Jupiter, 93million miles from earth. Other sources of meteorites include debris and rock fragments from comets, Mars and the Moon.

Meteors that enter the Earth's atmosphere reach speeds up to 150,000mph and become visible 60 to 90 miles up. Most are very small and will burn up before striking earth. Once in awhile, one is large enough to survive the passage through the atmosphere and impact earth. The intense heat from friction as the rock enters the atmosphere will cause the outer surface to partially melt causing a thin fusion crust to form. Larger pieces will often break up in flight due to the intense pressure of entry.

Meteorites are classified into three basic groups: iron, stones, and stony irons. Each of these groups will have their own sub groups. Iron meteorites consist mostly of iron with varying amounts of nickel. When etched, they will show their unique crystal pattern. They are thought to come from the core of an asteroid. They account for 6.5% of all falls.

Stone meteorites are made of silicate minerals and will often contain a small amount of metal grains. They account for 92% of all falls. Their origin is thought to be from the crust and mantle of an asteroid. Stony iron meteorites are a combination of the iron and stone. They only account for 1.5% of all falls. These are believed to originate in the core/mantle boundary of an asteroid.

Meteorite are named after the place or locality where they fall or were found. Exceptions are those found in the desert. Those are often given numbers and the region where they are found due to the lack of any landmarks. The deserts in Africa and Antarctica have proved to be prime hunting grounds for meteorites.

As of April 2013, 1671 verified meteorites have been found in the United States. Of these, 16 were found in Virginia. An excellent source of information on meteorites and dealers can be found at the Meteorite Exchange. <[www.meteorite.com](http://www.meteorite.com)>. EBay can also be a good source if you intend to purchase. Do some research before buying a meteorite. Prices can vary depending on the type of rock, availability and the dealer.

At the February meeting, there will be a display of meteorites from all three groups plus samples from the moon and mars. Come out and hold a rock that's out of this world.



## Foot Safety

by **Bob Green**, *SFMS Safety Chair, from the Lodestar, Nov. 2013, reprinted from EFMLS News Jan. 2014.*

This month we will discuss foot wear and safety. I work for a large Engineering, Procurement and Construction firm. Several years ago, our Greenville office had attained 40,000,000 effort hours without a lost time accident. Then in a span of 3 months we had multiple incidents that snapped the record. All of these were related to slips trips and falls. And the majority of these were associated with inappropriate footwear. The biggest offender was “flip flops”. These were not the ones you wear at the beach, but those adorned with “do-dads” to look less like “flip-flops.” Some of these even had slight heels. Anyway, several folks got to spend time at home recovering from slips, trips and falls, because of their “fashion statement.” In several travels, more folks are wearing these types of footwear and if you are traveling, these should be viewed somewhat skeptically. These are not appropriate to “hasten away” from danger. They are not friendly in the long term to your feet, because they do not adequately support your feet. Are they appropriate for the beach? Very definitely.

Now, are these appropriate for cutting your grass? No, only: if you have someone else doing the mowing. Several years ago, I met a young man that had lost a couple of his toes, because he had accidentally, slipped under his mower. He was wearing tennis shoes. He was mowing on a slope and the grass was wet.

During my senior year in high school, a good friend was playing with his hunting knife. He had a large block of wood on his desk and he was throwing his hunting knife at the block and his target was his foot. He was seeing how close he could come to his shoe. Well something distracted him and he hit his foot. He screamed and I was expecting to see a major cut. Luckily the knife went between his big toe and the toe next to it. Not even a scratch. However, a good laugh.

If you spend much time on your feet, you appreciate good and appropriate shoes. Wearing shoes without socks was a fashion statement when I went to college, but it was not healthy for your feet. Taking care of your feet is

critical to your health. If you contract “athlete’s foot”, this must be taken care of immediately. If you get blisters, these must be treated appropriately. One of my favorite TV programs is Les Stroud’s survival programs. On a couple of these, he has gotten blisters and used various methods of treating these. And in each case, he views this as extremely important to survival. Now, hopefully we are not in a survival situation, but these incidents must be carefully treated, particularly if your system is somewhat compromised. Folks suffering from diabetes or circulation issues, know that any type of foot injury is not to be taken lightly.

And we will all know that chopping wood in inappropriate foot wear is not a good idea/ An axe can be extremely unfriendly to your feet. I always wear steel toe boots when I chop or split wood. I am reasonably adept with an axe or wedge and sledge. However, I am also, realistic about the potential injury, if I am not careful.

The same goes for yard work- handling of the lawn mower is usually a straight forward bit if exercise. However, if your yard is sloped, you must protect against a slip that could result in a very uncomfortable trip to the medic.

I suffer from gout. One of my gout attacks unfortunately coincided with a snow fall. I missed one day of work but the next day, I wore my waders in to the office and then put on my “gout shoes.” So, I understand dealing with foot pain. My first attack came in 1986 and I pulled on my toe, thinking I had dislocated the toe. All I did was make the bad situation worse, however, I am smarter now that I was then.

I wish all of you good foot health! Take care of your feet and they will take care of you.

w

FROM EFMLS NEWS...



**Wildacres Registration Time Has Arrived At Last**

*When you arrive at Wild-acres  
Hurrah! Hurrah!*

*We'll give you a hearty welcome then  
Hurrah! Hurrah!*

*The men will cheer and the boys will shout  
The ladies they will all turn out  
And we'll all feel gay  
When you arrive at Wild-acres.*

begin accepting your registration beginning on January 2.

Have you thought about bringing a group of friends from your club with you? We've heard of two clubs that are already planning on having multiple members present during either the spring or fall session. We're looking forward to welcoming them.

If you've not been to an EFMLS Workshop at Wildacres yet, you can learn more about it by downloading and reading the December 2013 EFMLS News. <[www.amfed.org/efmls](http://www.amfed.org/efmls)> While there, you can also click on the Wildacres tab and see photos, download an application, and / or read about our speakers and classes.

So get out your pens and your check book, give us your wish list for classes you'd like to take during the session, address the envelope and mail in your registration. We'll delight in giving you a warm welcome.

Hurrah! Hurra!

Patrick Gilmore, an American Band Leader wrote the lyrics to "When Johnny Comes Marching Home" in 1863. Changing a few words easily describes the feeling of euphoria felt by both new and returning members of our EFMLS Work-shops at Wildacres. If you've never been, we hope you'll join us in 2014 and feel the warmth and excitement for yourself and if you've attended before, there's nothing more we can say!

Dates for our 2014 session have been secured and instructors for our wonderful classes lined-up. Registration forms and class lineup available on pages 8, 9, and 12 of the January 2014 EFMLS News, which you can access at [www.amfed.org/efmls](http://www.amfed.org/efmls) Pamm Bryant, our Wildacres registrar will

**Spring Session: April  
7-13 2014**

**Classes:**

- Cabochons-  
Basic-Intermediate
- Chainmaille
- Enameling Basics
- Faceting
- Fused Glass
- Micromounting

- Pewter Fabrication
- Silversmithing  
Basic-Intermediate
- Viking Knit
- Wirewrapped Jewelry  
Basic-Intermediate

**Fall Session- September 1-7  
2014**

**Classes:**

- Cabochons Basic-Intermediate
- Geology 1 & 2
- Glass Engraving & Etching
- Faceting
- Lost Wax Casting
- Silversmithing 1 & 2
- Soapstone Carving

**Hobby Related Websites that you may be interested in:**

*Amazing Gem and Mineral Museum* has a newsletter you can subscribe to, as well as visiting the site and viewing the many specimens, jewelry and art. Information submitted by Dee Tinsley.

<http://www.amazinggemandmineralmuseum.com>

*Gem Guru* is a Connecticut based group writing about gemstones.

*“Any feedback, such as article suggestions, guest writers and even constructive criticism is most welcome. We are always looking to feature any topics that are of interest to the gemstone and gemstone jewelry world.”* This information came to us via our website.

[www.gemstoneguru.com](http://www.gemstoneguru.com)

**2014 EFMLS Convention**

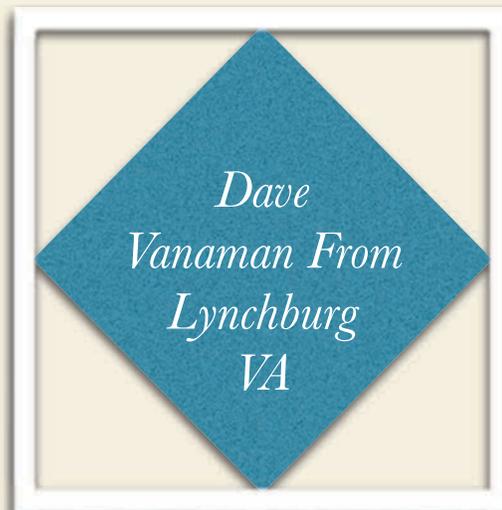
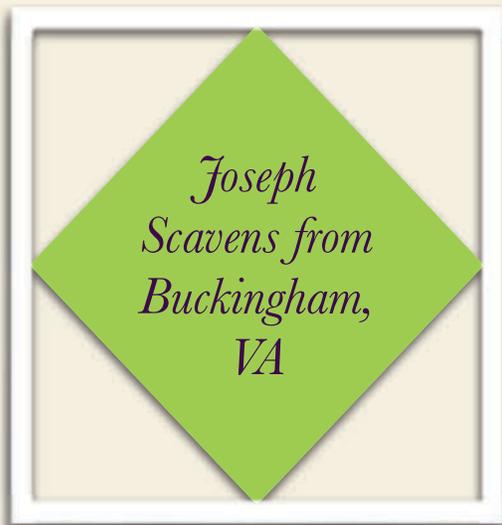
*Co-Hosted by the Philadelphia Mineralogical Society and The Delaware Valley Paleontological Society.*

**March 29-30**, with the EFMLS Annual Meeting to be held on **Friday, March 28.**

Mineral Treasures & Fossil Fair Co-Hosted by the Philadelphia Mineralogical Society & Delaware Valley Paleontological Society. LuLu Temple, 5240 Butler Pike, Plymouth Meeting, PA. For complete details please visit the EFMLS Website, or [philamineralsociety.org](http://philamineralsociety.org)

“In addition to the convention, there will be a few special field trips; seminars, hands-on educational activities and shopping for children and adults with a full hall of vendors at the show venue.”

**Welcome New Members:**



## UP COMING

## FIELD TRIPS...

**Dixie Mineral Council Field Trips...**

*continued from page 7*

Where: Sugar Creek near Millington, TN

Assembly Time: 9:00 am (CST) Popeye's is located in front of Walmart at 8845 U.S. 51, Millington, TN. Corner street is Wilkersville Blvd.

Sugar Creek is located about 20 miles north of Memphis, TN and 10 miles north of Millington. We will assemble and depart Popeye's parking lot at 9 am Central Standard Time. We will caravan to the collecting site. There are multiple motels located on Highway 51 in Millington. Majority within one mile of meeting place.

Collecting: This will be the DMC first trip to Sugar Creek. The creek begins at the Mississippi River and meanders around 5-6 miles through West Tennessee loess hills. Along the creek are multiple gravel bars. Primary collecting will be at these gravel bars. Material will be agate, jasper, chert in multiple colors and banding, fossil chert and petrified wood. Rare finds include Lake Superior Agates, Ice Age fossils such as horse and bison, and mastodon has also been found in area. Material is excellent for tumbling and lapidary work,

Collecting Conditions/ Tools: Creek collecting. You must wade(get wet) in order to access many of the gravel bars. Recommend boots or water proof shoes or a change of shoes/socks. No digging required. Recommend walking stick. Stick with a metal point is good for checking for petrified wood as it will sound like glass when poked. Also recommend backpack, fanny packs and/or plastic buckets although five gallon buckets can be cumbersome in

creek collecting. Children are ok. However, they must be supervised and in direct contact/site of an adult at all times.

Weather - Weather in late March is unpredictable and may vary. Be prepared. If there is adverse conditions. The host club will make ever effort to inform attendees. Check club site [www.memphisgeology.org](http://www.memphisgeology.org) for updates.

**IMPORTANT NOTE.** If heavy rains make the creek inaccessible or unsafe for collecting we will move the collecting trip to the Memphis Stone and Gravel pit which is near Millington. It will not change or alter the meeting time or location

Special note: The host club, The Memphis Archaeological and Geological Society. will provide drinks, snacks, dry socks and special awards/prizes for your creek finds.

Directions:

Traveling west I-40 from Nashville

- Take TN-385/TN-205 exit, EXIT 24-25, toward Millington/Arlington/Collierville
- Take Exit 24 toward Millington 17 miles to Highway 51
- Merge -51 N/US-51 N/TN-3 N toward Millington
- Travel 3.6 miles to Popeye's is on the left

Traveling north I-55 from Mississippi

- Travel north on I-55
- Follow directions to 240 north
- Take exit 2A on the left toward US-51/ Millington.
- Travel 15 miles to Popeye's is on left

Field trip leaders Charles Hill [901-626 4232](tel:901-626-4232), WC McDaniel [901 490-3575](tel:901-490-3575). [w.c.mcd@att.net](mailto:w.c.mcd@att.net).

*Continued on page 19*

*From The First VP: continued from page 1*

## Introduction to Gemstones

By Judy Ann Olsen

"Have you ever wondered what gives a gemstone its appeal? Or why some gemstones are considered precious and others semi-precious? How did mankind discover and develop modern mining techniques? And where do gemstones come from? Explore the answers to these questions and gain a basic idea of how, when, and where the global gem trade originated. Here, we will illustrate an overview with broad and colorful strokes so that you can gain a general understanding of the nature of gemstones.

### ***What Makes a Gem ....a Gem?***

Gemstones come from many sources and are comprised of different things. A gem can be a rock, a mineral, or organic matter. The main factor in elevating a rock, mineral, or biogenic substance to gemstone status comes down to two fundamental factors: rarity and beauty.

Those who live in the mountains can attest to the fact that the surface of the earth is rock. But what lies beneath the surface is believed to be very different. The structure of the earth as we know it consists of a molten metal core surrounded by shifting plates that form the mantle beneath the rocky crust. Within the rock cycle of volcanic eruption, surface erosion, transport and deposition, burial, and melting, areas of intense heat and pressure are created where rocks crystallize, bearing minerals. Gem minerals such as corundum (which comprises sapphire and ruby) and beryl (which comprises emerald and aquamarine) are widely known and appreciated as are gem rocks such as lapis and obsidian. Biogenic gems derive from organic matter and include amber, coral, and pearl to name a few.

### ***The Precious Gems***

The list of precious gems is short. The custom of distinguishing between precious and semi-precious began in classical Greece. The gems we recognize today as precious gems are diamonds, rubies, sapphires, and emeralds. Semi-precious gems refer to all gems other than these. The four precious gems share important factors that contribute considerably to their perceived value:



The precious gems are exceedingly rare

They are the hardest among gemstones

They are all translucent

Gemstones are also characterized by their optical properties such as refractive index (how a gemstone bends light) as well as hardness and toughness. Hardness is expressed numerically from one to ten with one being the softest (talc) and ten being the hardest (diamond). This system of classification is known as the Mohs scale because it was invented by a 19th century geologist named Friedrich Mohs. Hardness refers to a gemstone's resistance to scratching while toughness refers to its resistance to chipping and breaking.

### ***Where Do Precious Gemstones Come From?***

Significant gemstone deposits have been discovered, explored, and often depleted across the globe. A significant portion of gem mining is artisanal, done by hand without a huge environmental impact. In open pit mining, huge amounts of surrounding rock are relocated. Alluvial mining is the most archaic form of mining and is still practiced today. Alluvial deposits occur when mineral deposits are transported by water and settle into the sediment. Here is a brief list of geographical locales famous for their gemstone mines:

*continued on next page*

*From The First VP: continued from page 18*

**Ratnapura, Sri Lanka:** Located in the southwest of Sri Lanka, an island off the southern coast of India, Sri Lanka is the origin of the majority of fine sapphires. The gem trade is a huge portion of this country's economy.

**Bo Rai, Thailand:** A major source of sapphires and rubies, the gem trade fueled the economy of this eastern Thailand township until the mines were exhausted.

**Mogok, Myanmar:** Formerly known as Burma, 90% of the world's rubies are mined in Myanmar. The Mogok Township is noted particularly for the color and clarity of its rubies. Most are sold to dealers in Thailand, as the oppressive government runs the mining industry and many other foreign businesses refuse to buy Myanmar rubies due to the deplorable human rights abuses by the military.

**Kimberley, Australia:** This region of northeast Australia is home to the Argyle mine, the world's only source of rare pink diamonds and represents one third of global diamond production.

**Muzo, Coscuez, and Chivor, Colombia:** Known as the world's leading source of emeralds, Colombia is also home to the world's oldest working gem mines.

Across the World

Significant mineral deposits bearing gemstones have been discovered on every continent except Antarctica. And the peoples of the world will continue to seek out these captivating gifts from the earth. What is it about a gemstone that interests you? Do you see collecting gems as a pastime or an investment? Are you looking for something to pass on to future generations, or do you feel that the beauty of a gemstone is justification for collection in and of itself?"

It may be a bit late to start work on a cabochon or to facet a stone for your loved one at one of our workshop Saturdays to be in time for Valentine's Day, but now we have a better understanding of gemstones and where to find them. Does anybody know someone in Colombia or Sri Lanka?

*Happy Hunting,  
Jack Curtin*

**DMC TRIP...continued from page 17**

*Rocks of Sugar Creek  
Assorted agates., Fossils. Petrified wood  
Agates  
submitted by*

Field Trip leader for the GMSL and RVMGS...David Callahan...  
[540-297-1853](tel:540-297-1853) or [dbc11@aol.com](mailto:dbc11@aol.com)



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



Lynchburg Rock Raiders is the official Future Rockhounds of America association of the The Gem & Mineral Society of Lynchburg, VA, Inc.



### IMPORTANT REMINDER:

**GMSL and Lynchburg Parks and Recreation Inclement Weather Policy**

**If the Lynchburg City Schools are closed, our meeting is CANCELLED.**



### Reminder...

#### **NEW MEETING LOCATION**

Lynchburg Parks and Recreation  
**Fairview Center**  
3621 Campbell Ave.  
Lynchburg, VA

**DIRECTIONS:** Fairview Center; 3621 Campbell Ave., Lynchburg, VA 24501 434-847-1751~ From Route 29 expressway or Route 460, take the Campbell Avenue Exit. Follow Campbell Ave. to 3621, which is across the street from a **Citgo Gas Station**. There is a fence around the building and parking on both streets running along the sides of the property as well as a lot in the back. We will be looking for you!