

GEM & MINERAL JOURNAL

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

WWW.LYNCHBURGROCKCLUB.ORG

Presidents Message

Hello To All,

If you were not able to attend the January club meeting, I made an announcement of a large donation of lapidary and metal working equipment by the family of William Ligon after his passing. There is a long list of items but the most impressive pieces are Genie type cabing machines, faceting machine, polishing cabinet, horizontal flat lap machine, several diamond saws, metal rolling mills, freedom type flexible shaft polishing machines and bench top drill press. Also included were six drawer cabinets filled with hand tools and accessories for all the equipment. We were very fortunate to receive this donation, it gives us the ability for more members to have a machine to work with at teaching and learning workshops. I hope everyone will take the time to come to the next workshop and decide

what type of lapidary or metal working project you would be interested in doing. At the February meeting we will discuss more teaching workshops and also having an inventory of sterling silver bezels, mounts and belt buckles to complete projects by Club members. Let a member of the Executive Committee know what you are most interested in taking on as a project.

Please remember that the February 20th meeting program will be our annual AUCTION. The Club has been able to purchase, at a very good price, some 60 to 70 nice specimens to auction this year. Come early to get a good look at the items you would like to bid on. Remember this is a fund raiser for the Club as well as a great opportunity to add some really nice specimens to your collection.

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From the First VP:

Many people hope to identify their rock and mineral specimens by their color, which can be quite misleading, because other properties such as hardness are much more specific for a particular mineral. But, let's explore the process of using color. About.com:Geology has a great series of articles on the subject.

**Reprinted from About.com:Geology
From Andrew Alden, your Guide to Geology**

I hear from many people about identifying minerals (rocks, too), and it's very common for them to focus

on color. Using color requires caution. So I've been building new color-specific mineral guides (I mentioned the one for [green minerals](#) three weeks ago).

Green and greenish rocks get their color from green minerals, but a lot depends on the type of rock: igneous rocks, sedimentary rocks and metamorphic rocks each have their own set of green minerals. It will help if you know how to distinguish those major rock classes as well as "[How to Look at a Rock](#)." But first, be sure you're looking at a fresh surface! Don't let a coat of green algae fool you. Green minerals can be hard to identify until you've learned something

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January Meeting Minutes

Meeting-Wednesday Jan. 16, 2013 @ 7:00 PM

Attendance- 22 members and 1 guest

Host- Natalie and Warren Darling were hosts for January, and Debra Tyler will be the host for our February meeting.

On Time Drawing- Winners were: Siglinde Allbeck, Noel Weller, Natalie Darling, Thom Noble, Diane Capobianco, Steve Lenhart, Debra Tyler, Nona Haskins, Frank Midkiff, Linda Noble.

Old Business- John Haskins: Don McIntyre introduced the 2013 Elected Officers: John Haskins, Dave Callahan, Frank Midkiff, Natalie Darling, Linda Noble, Bernardino Rivera and not present- Tony Shields and Jack Curtin.

V.P.- Jack Curtin: Not present.

Second V.P.- Dave Callahan: 1/26/13 Dixie Mineral Trip to Jackson Crossroads, 2/6/13 Vulcan Mineral Trip to Florida

2/16/13 James Madison University trip to museum and

classroom to meet with Dr. Lance Kearns 9am –12 noon. Sign up sign sheet available for this trip.

Treasurers Report- Franklin Midkiff: Balance at this time is \$7,700.87.

New Business: John Haskins announced the club has received a donation from the family of the late William Ligon of equipment and tools which must be appraised, cleaned and organized. There will be a workshop next Saturday, January 26, 2013 starting at 9 am at Dave Callahan's to do this.

Program: Dr. Steve Lenhart gave a presentation on Cheap and Easy Display Stands for your prize rock and mineral specimens.

In addition to our silent auction, Frank Midkiff brought some club tee shirts, Dave Callahan had specimens for sale, and Natalie and Siglinde had beads for sale.

Minutes submitted by:
Linda Noble, Secretary

2013 ELECTED OFFICERS

PRESIDENT - John Haskins
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Members At Large-

Bernardino Rivera &

Tony Shields

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

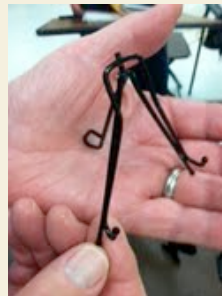
Workshops- Dave Callahan

FRA Adult Liaison- OPEN

Membership- Thom Noble

PROGRAMS

For our first program of the new year, Dr. Steve Lenhart joined us for a discussion on **“How to Prepare and Show Rock Specimens.”** We all took away some fabulous ideas to enhance our displays. We learned that the best color for specimen stands is black, and there are many simple items that can be turned into stands and painted black if necessary. Photographs of some of the ideas below.



My personal favorite- Stands made from tubes (PVC pipe, paper towel tubes, or mailing tubes) and cardboard, painted black. Make them in various sizes and heights to meet your needs. BRILLIANT!

From left to right: Plate Holder, Drapery Hook, and Plastic Mineral Stand, all inexpensive items, painted black (so they fade into the shadow of the specimen and become un-noticed.)



PROGRAM FOR OUR FEBRUARY 20, 2013 MEETING

The Gem and Mineral Society of Lynchburg ~ Annual Auction

We have many specimens as well as other hobby related material to be auctioned off and taken home by the high bidder. The auction will start promptly after a shortened version of our regular business meeting, so Come One, Come All-- Join us for this special annual event. Friends and family are welcome and may bid on items also. Don't miss your chance to acquire some beautiful new specimens or other hobby related items for your collection.

Please be sure to have cash or your check book to pay for your purchases.
We do not accept credit or debit cards.



FIELD TRIP REPORT... UP COMING FIELD TRIPS

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

2nd VP Report for February 2013

Reprinted from our January 2013 Newsletter

COMBINED LYNCHBURG / ROANOKE CLUB FIELD TRIP

SATURDAY, FEBRUARY 16, 2013

9AM until NOON (weather permitting)

JAMES MADISON UNIVERSITY,

Harrisonburg, Virginia

GEOLOGY DEPARTMENT and

MINERAL MUSEUM

**Sign-up required...call me, e-mail me or see
me at the meeting**

**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.

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)

* 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 right, and the mineralogy lab will be open.

Continued on next page

Field Trip Report...*continued from page 4*

* 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 new brass plaque on the Virginia mineral collection cabinet.

The Gem and Mineral Society of Lynchburg and The Roanoke Valley Mineral & Gem Society.

David Callahan, Field Trip Chairman
E-mail dbcalls@aol.com
Home phone- 540-297-1853
Cell phone- 540-874-5201

Our future field trips in the planning stage. These are not confirmed as of this date. Hold the date open if you would like to attend.

- March 23, 2013....Faber Mine
- April 27, 2013....A Nelson County Quarry
- April (date has not been determined or even confirmed by SFMS).... Glendon Quarry
- May 25, 2013....Our confirmed DMC event at a Nelson County Quarry
- June 22, 2013...Old manganese mine in Appomattox County.



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)

BENCH SHEARS

When cutting sheet metal, it's quicker and easier to use a set of shop shears as compared with using a hand saw. The cut is not as precise, but many times you don't need that. Shears will easily cut up to 24 gauge sheet, and some will cut 22 or even 20 gauge.

Current prices for shears run from \$13 - \$22 in jewelry catalogs, and the Joyce Chen scissors recommended on some jewelry blogs run more than \$20. But we found a cheaper alternative at the 99 Cent Store - some gardening utility scissors that were only \$1.07

I buy a half dozen of them at a time for use in my jewelry classes. They're great for cutting bezels,

trimming around a bezel cup, and cutting a piece off a larger sheet.



BEZEL CLOSER

A bezel closer is a steel punch that makes quick work out of pushing the metal down over a round stone and burnishing it. The working end is a concave cavity that fits over your bezel or prong setting and is

Continued on page 9

Executive Committee Meeting Minutes

February 6, 2013

Attendees: John Haskins, Nona Haskins, Siglinde Allbeck, Natalie Darling, Bernardino Rivera, Thom Noble, Linda Noble, Dave Callahan, Dave Woolley, Frank Midkiff and Jack Curtin.

Not Present: Tony Shields

Group discussed the issue of whether the club should file a 501(c) 7 status.

Thom provided all with a copy of a spreadsheet he created showing Current Retail Price, Condition, Condition Factor and Current Value of items obtained from the Estate of William Ligon. Goal is to determine a dollar amount to provide the Estate a value estimate for tax purposes.

John talked about preparations for the upcoming February meeting that will consist of an auction that will be open to all club members and to the public.

Group discussed the Workshop Schedule and decided to establish the 2nd weekend of each month as an open workshop date for all members to come out use the equipment. John suggested have findings available for members to purchase which would help with teaching and allow folks to see finished products. This may also encourage new members to come out and learn. Natalie will research the cost and selection of the findings and email all with her results.

Natalie will advertise in the newsletter for a new Rock Raider Leader.

Group discussed the decline in membership and the possibility of sending a survey to all club members. Dave Callahan will get a copy of the survey from the Roanoke club to be used as a guideline. He also

talked about upcoming field trips. February's Field Trip to JMU is Saturday February 16th.

Thom to contact Casper Voogt about updating the club website to include new officers, dates, links and replace membership application with one that has our new location at The Fairview Heights Community Center.

Submitted by Linda Noble, Secretary



Public Lands

*By John Martin, Conservation & Legislation Chair
Reprinted from AFMS Newsletter- February 2013*

PUBLIC LANDS

Have you ever picked up a rock
Cut it open and revealed the beauty
Fashioned it into a beautiful piece of jewelry?

Have you ever found a mineral specimen
Examined the structure and marveled at the color
Observed the entire specimen as a wonder of nature?

Have you ever found a fossil
Looked at the pattern left long ago
Wondered about life before us?

Have you ever taken these rocks
These minerals, these fossils
to the children at the schools?

Shared with them the beauty and wonder
Showed them a record of the history of life?
Don't make them simply look at pictures in a book.

Don't tell me I'm using up your resources
Destroying something that should be preserved
I am preserving the most precious resource

Let the children touch and see
The wonders of my hobby
Pass on the natural curiosity and zest for life I harbor.

Rock Raiders

We are currently looking for someone to lead our Junior Rockhounds Programs, held during the business portion of our regular club meetings.

Qualifications:

Desire to enrich and cultivate interest in the earth sciences among youth.

Prior experience not necessary. Several club members have program ideas, material, and support available to assist in this endeavor. Please contact John Haskins if interested.

Our ROCK RAIDERS THANK YOU!



Upcoming Events

FEBRUARY 2013


Feb. 20th- GMSL Annual Auction. The Auction will be held at our regular monthly meeting, following a short business meeting. Members and guests encouraged to come and bid on some fabulous hobby related items.

Feb. 23rd-24th- 20th annual James Campbell Memorial Gem, Mineral & Fossil Show and Sale sponsored by the Capital District Mineral Club and New York Academy of Mineralogy. NY State Museum, Empire State Plaza, Albany, NY.

March 2nd-3rd- 50th annual Earth Science Gem & Mineral Show sponsored by the Delaware Mineralogical Society. Delaware Technical & Community College, Newark, DE

March 8th-10th- 25th Annual Aiken-Augusta Gem, Mineral & Fossil Show sponsored by the Aiken Gem, Mineral & Fossil Society and Augusta Gem & Mineral Society. Julian Smith Casino, Augusta, GA.

March 9th- Workshop at Dave Callahan's- 9:00 AM- until...Contact Dave for directions of additional information. (email and phone #'s on page 4).

SUN	MON	TUES	WED	THURS	FRI	SAT
					1	2
3	4	5	6	7	8	9
10	11	12	13		15	16 JMU Field Trip
17	18	19	20 Meeting 7PM	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.

NEW MEETING LOCATION: Fairview Center; 3621 Campbell Ave., Lynchburg, VA 24501

434-847-1751~ Directions to Fairview Center: 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!

Bench Tips...*continued from page 5*

pushed and twisted to capture the stone. Sets can be purchased but are expensive and contain many sizes you will probably never use. If all you need is one or two sizes, here's how you can make them yourself.

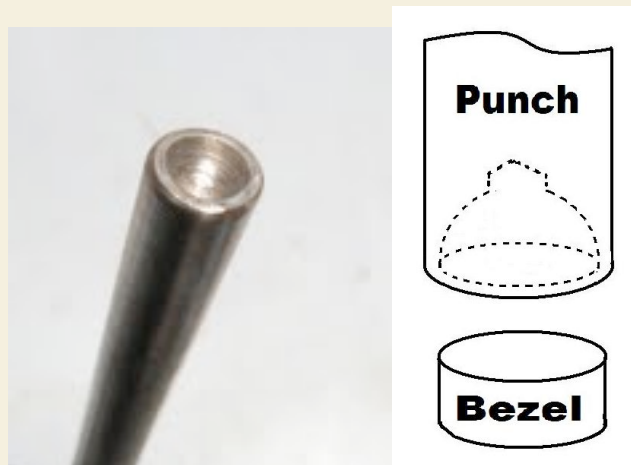
Find a good quality, round steel rod a little larger in diameter than your bezel cup or prong setting. Cut a 5 inch length. File both ends flat. Locate the center of one end, centerpunch a divot, and drill a small pilot hole about 5 mm deep. Remember to use a little oil as lubricant when cutting steel.

Select a ball bur a bit smaller than the steel rod but slightly larger than the bezel. Enlarge the pilot hole to a full hemispherical cavity. Test for proper fit with your bezel. Bezel should first contact the cavity about a third of the way in. When the size is correct, polish the cavity using Zam on a length of chopstick in your flexshaft. If the tool is not polished, it will leave scratches on your bezel or prongs.

When using the tool, the first step is to capture the stone correctly. I usually work by hand and push the

punch straight down over the bezel or prongs. This causes the metal to start bending over the stone. Now inspect with a lens to be sure the stone is staying level. This is repeated until the stone is seated on its bearing and can't move anymore.

Next, you want to force the metal down onto the stone uniformly all the way around. While this can be done by hand, I often gently tap the punch with a hammer. Finally, I burnish the bezel by twisting the punch around.



*Presidents Message...**continued from page 1*

On February 16th the Saturday before our meeting, is our field trip to James Madison University. We will be able to use the Geology lab as well as go into their mineral museum. Any one that has been there before can tell you how great a time we have. Also, weather permitting on Saturday afternoon we will attempt to collect some nice material close to Ruckersville, VA. Most of which will be material used for making bookends, clocks, spheres, candles and cabachons. We can talk about this at JMU before we depart. I hope to see you all at our February 20th auction meeting.

Keep Looking Down,
John Haskins

From The First VP...*continued from page 1*

about the most common ones. Here they are, along with their usual [luster](#) and [hardness](#). If your green or greenish mineral doesn't fit one of these, there are many more possibilities. Another tidbit: green colors usually arise from the presence of iron or chromium and sometimes manganese.

[Actinolite](#)



Actinolite close-up — Geology Guide photo

A shiny medium-green mineral with many long, thin crystals is likely to be actinolite. Look for it exclusively in metamorphic rocks, where it forms crystals in [marble](#) or is disseminated in [greenstone](#). Its color is from iron; the white variety without iron is tremolite. Luster glassy to pearly; hardness 5–6.

[Chlorite](#)



Chlorite specimen — Geology Guide photo

It's the most widespread green mineral, but one you may never see by itself. In microscopic form, chlorite gives a dull olive-green color to a wide range of metamorphic rocks from [slate](#) and [phyllite](#) to [schist](#). It is also found in small spots or masses in which it displays a flaky structure like that of a [mica mineral](#), but it gleams rather than sparkles and doesn't split into flexible sheets. Luster pearly; hardness 2–2½.

[Epidote](#)



Typical epidote — Geology Guide photo

Epidote is common in medium-grade metamorphic rocks as well as late-stage igneous rocks such as [pegmatites](#). It's typically a pistachio or avocado green when it occurs in the massive form—crystals have a wider color range. Luster dull to pearly; hardness 6–7.

[Glauconite](#)



Glauconite in greensand — Ron Schott (Flickr CC BY-NC-SA 2.0)

This is the usual green mineral found in greenish marine [sandstones](#) and the gardening amendment known as greensand. It's a [mica mineral](#), but because it forms by alteration of other micas it never makes crystals. You'll generally see it in the form of a blue-green color rather than a separate mineral. Luster dull; hardness 2.

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Jade (Jadeite/Nephrite)



Jadeite piece — Geology Guide photo

Few minerals excite the rockhound like jade, but it can be hard to distinguish. Two minerals, jadeite and nephrite, are recognized as true jade. Both occur where serpentinite is found but form at higher pressures and temperatures. Nephrite (a microcrystalline form of [actinolite](#)) has a hardness of 5–6; [jadeite](#) (a sodium [pyroxene mineral](#)) has a hardness of 6½–7.

Olivine



Olivine in Hawaiian basalt — Geology Guide photo

Dark primary igneous rocks ([basalt](#), [gabbro](#) and so on) are the exclusive home of olivine. It's usually found in small clear olive-green grains and stubby crystals. A rock made entirely of olivine is called [dunite](#). Olivine breaks down at the Earth's surface by [chemical weathering](#). It would rather live deep beneath the Earth's crust, where it is most stable. Olivine gives the rock [peridotite](#) its name, peridot being the gem variety of olivine. Luster glassy; hardness 6½–7.

Prehnite



Prehnite balls — fluor doublet (Flickr CC BY-NC-SA 2.0)

Rocks metamorphosed by hot-water solutions may have prehnite crusts and [botryoidal](#) clusters along with pockets of [zeolite minerals](#). Prehnite has a light "bottle-green" color and is quite translucent. Any rock shop will have prehnite specimens you can learn this mineral from. Luster glassy; hardness 6–6½.

Other Green Minerals



Mariposite — Geology Guide photo

Serpentine



High-grade serpentine — Geology Guide photo

Serpentine is a metamorphic mineral that occurs in [some marbles](#) but more often keeps to itself in the distinctive rock [serpentinite](#). It typically occurs in shiny, mottled, streamlined shapes and never in crystals (except sometimes as [asbestos](#) fibers). Its color ranges from white to black but is mostly dark olive-green. Serpentine is a sign of high-magnesium (typically deep-sea) lavas that have been thoroughly altered by [hydrothermal activity](#). Luster greasy; hardness 2–5.

Submitted by First VP Jack Curtin.

From: http://geology.about.com/od/mineral_ident/tp/Green-Minerals.htm?nl=1

Natalie Darling, Editor
211 Chesterfield Rd.
Lynchburg, VA 24502



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

**IMPORTANT NOTICE REGARDING
INCLEMENT WEATHER POLICY:**

*If the public schools are closed or close
early on the day of our scheduled meeting,
then our meeting will be cancelled.*



JUST IN- New Beads from our first show of the year!

We will have samples of our newest selections for sale prior to the
February Meeting. Arrive early to shop,

We will be set up from 6:30 to 6:55 only.

We also have craft wire in various gauges and colors available. This wire
is excellent for making gem trees or other craft items.



Reminder...

NEW MEETING LOCATION

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

Directions on page 8

