

Presidents Message:

Hello To All,

The month of May was a very busy month for the GMSL workshops. There was good participation by Club members for these workshops and I would like to thank all who came out and donated their time and talents to help the Club prepare for the Uncle Billy's Day Festival. There were several members that did not have a lot of experience in the lapidary phase of rock collecting, but learned very quickly to saw, grind and polish some beautiful Cabochons, clock faces and bookends. If you didn't have the opportunity to take part in the May workshops don't despair. There are plans to have Saturday workshops every month until cold weather runs us inside again. You need to come on out to a Club

workshop at Dave Callahan's, I think you will be pleasantly surprised at all the equipment available for you to use. At the present time there are four diamond blade rock saws, four lapidary grinding machines with carborundum and diamond wheels, six sphere making machines and an assortment of hand held abrasive right angle grinders for roughing out spheres and grinding clock faces and bookends. If you know how to use this equipment or would like to learn how to do any of these processes please come on out to the workshop and see what beautiful and lasting creations you can make. We will have several members on hand for anyone that needs instructions. *Continued on page 15*

From the First VP:

Being members of the Gem & Mineral Society of Lynchburg, we are privileged to use the club's equipment now housed at Dave Callahan's. The costs given in the article are included to give you estimates of the cost if you were to invest in the equipment yourselves. Watch those fingers!

This beginning lapidary information article was written by Donald Clark CSM of The International Gem Society.

Till next time,

Jack Curtin

"Fundamentals of Lapidary, Making Smaller Pieces"

One discipline that is common to all forms of lapidary is how to take large pieces of stone and reduce them to useful sized pieces. If you are in the field, you might be able to drop them off a precipice, and then retrieve the pieces at the bottom. This method has two disadvantages. One is that there is rarely a convenient cliff to drop them off. Second is that the method is extremely wasteful. You have no control over how the pieces break and you are not likely to find them all.

Lacking a handy cliff, you will have to resort to mechanical methods. The quickest way to reduce a large rock to smaller pieces *Continued on page 13*

2011 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

midkiff@aol.com**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**- Daryl Grant**Membership**- Ralph Torning**May Meeting Minutes****Meeting:** Wednesday May 18, 2011**Attendance:** 36 members and 2 guests.**Hospitality:** Our host for this evening was Jean Midkiff. June's hosts will be Tom and Linda Noble. Our host for July will be Bernard Rivera. Thanks to all who volunteer to keep up our refreshments.**On Time Drawing:** Winners were Sage Grant, Michelle Grant, Heinz Mueller, Jean Midkiff, Natalie Darling, and a rock raider (I did not get the name).**Old Business:** Silent Auction and specimens for sale by Dave Callahan were available. Workshops at Dave Callahan's have been very productive. To date we have an inventory of over 30 pair of book ends, several hundred sluice bags packed, new items completed include clocks and belt buckles. There have been many helpers-very much appreciated. There will be a gathering at Dave's on May 28th to finish up and load the trailer. Trucks carrying supplies to Uncle Billy's Day will be packed on Friday evening 6/3.**First Vice President:** Jack Curtin: Tonight's program will be a video on "How the Earth was made. It is an hour and a half

video, so we hope to see half tonight and the other half at a future meeting.

Second Vice President: Dave Callahan: Field Trips/Activities: 5/21 Faber Mine field trip; 6/4 DMC trip to Chunky Gal Mine in NC; 7/28-7/31 Franklin NC for field trips and gem and mineral shows; 7/31-8/7 Spruce Pine NC, for camping, field trips, and gem and mineral shows.**Treasurers Report:** Treasury balance at this time is \$5600.98; supplies have been purchased for clocks, belt buckles and our saw.**New Business:** Dave Woolley brought some specimens from Franklin NJ for our viewing pleasure. He also gave the club some get well cards that were donated by Dee Tinsley. Dave recently paid a visit to a northern Virginia mineral club annual auction and purchased a jar of "end cuttings" of chromite from The State Line Mine (MD/PA). He generously offered samples to anyone interested.**Minutes submitted by
Natalie Darling**

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

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

Programs

The program for our May meeting was the first half of a video on "HOW THE EARTH WAS MADE" We will hopefully get to view the second half at a later date.

Bench Tips by Brad Smith

*More Bench Tips by Brad Smith are at: groups.yahoo.com/group/Bench_Tips/
Or facebook.com/Bench_Tips*

TOOTHPICKS

The round, stronger toothpicks have a multitude of uses on the jewelry bench. I use them for mixing epoxy resin, for applying paste solder, with Zam for polishing in tight spots, and with a bit of beeswax for picking up and positioning small stones. They're particularly good for testing the fit of a small faceted stone in a prong or tube set finding.

PUMICE WHEELS

Pumice wheels are good for touching up a bezel after you've set the stone. The hardness is about 6 on the Moh's scale, less hard than quartz, so it shouldn't scratch any of your jaspers. However, I'd avoid or be real careful of using pumice near the softer stones like turquoise, amber, howelite, etc. If you're unsure that a wheel is pumice, test it with a piece of glass. Glass is about 5 ½ on the Mohs scale. If it doesn't scratch glass, it shouldn't scratch quartz.

MAGNETIC PIN FINISHER

There is a good article about making your own magnetic tumbler at <http://www.rchristopher.com/tech/tumbler.html>

The person reporting this on the YahooGroups Jewelry Casting list says he's made two units from these plans and they work very well. In addition to the primary job of burnishing and polishing finished pieces, he also uses the units for cleaning investment from castings.

The stainless steel pins are available from either *Gesswein* or *Rio Grande*.



Field Trip Report



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

For further information on field trips, contact David Callahan,
540-297-1853
Email dbc11@aol.com

Faber Lead Mine, Albemarle County, VA. Saturday, May 21, 2011

This has always been a very popular field trip for our club. The limiting factor is the restricted parking along the highway. There is room for no more than 12 cars, allowing room for safe parking and departing. We shared rides so there was no problem. We originally had 37 sign up but after some last minute cancelations, we ended up with 27 attending.

Many of the attendees were new club members and this was their first field trip so their expectations were high. Still others were old timers that had been there many times before looking to improve their collections. All in all, we had a diverse group with a good mixture of the younger and older generations.

Upon arrival at the site and a brief description of the surroundings, we struck out to find treasures. The lower dumps are always a popular place, so most settled in there. Others ventured on higher up the hill and scoured the shaft rim dumps. Treasures were found in all places but you must dig down thru the years of soil accumulation into the rock dump. Diligent searching thru the rocks, looking for that little seam of white quartz, maybe even white or purple fluorite or a heavier than normal rock is your clue to examine the rock more closely. Just smashing with a hammer is one way but you stand a good chance of destroying a beautiful specimen. Believe me; I've destroyed a lot in my years of field collecting. Time and experience will teach you to quickly analyze culls from treasures, more or less.

Everyone had a good time and enjoyed the experience. We did encounter one copper head about 18" long but a keen eye and quick thinking took care of the potential problem. We had all cleared the area by 4PM and all had a safe return trip home.

I always look forward to this field trip in the spring after hunting season. If you would like to attend next spring, keep May 2012 in mind.

Last years attendees gathered at the gate of the Faber Mine.



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Contact Information for Field Trips:
David Callahan,
Field Trip Chairman
Home phone 540-297-1853-----
Cell phone-----540-874-520-----
E-mail dbcalls1@aol.com

Our **June field trip** was the Dixie Mineral Council trip to Chunky Gal Mtn. Corundum Knob, Clay County, NC. on June 4, 2011. This was a go on your own trip. We had several members attending.

July Field Trips

At this time, we are considering two trips. Plans are being finalized and will depend totally on the participation and interest of our members.

You must contact me by phone, email or sign up at the June meeting. Do not delay!!!

First Trip: Franklin, NC. July 28 thru 31, 2011 (show dates)

Field trip leader for the Franklin trip will be Royce Wickham

Tentative plans

Camping sites are available for RVs, individuals, groups or Motels available

Mineral collecting field trip to Chunky Gal Mountain for corundum and Buck Creek for garnets.

There are many tourist gem mines with sluices in the area with native and salted material.

Very nice large gem show and mineral museum.

More information will be available as it's developed.

Will probably drive down on Friday July 29, collect Saturday and return home on Sunday, July 31, 2011.

Web site: www.franklin-chamber.com

Second Trip: Spruce Pine, NC. July 31 thru August 7, 2011 (show dates)

Field Trip leader for the Spruce Pine trip will be David Callahan

Tentative plans

Camping sites at the Bear Den Campground for RVs, groups and individuals as well as cabins.

We will more than likely drive down Friday, August 5th, field trips on Saturday August 6th and return home on Sunday, August 7th. I can reserve a group tent camp site for Friday and Saturday nights if we have 6 to 8 "tenters". There are many RV sites and cabins also available for individuals. See www.bear-den.com.

Mineral collecting Saturday at the Ray Mine and Sinkhole Mine.

The Mitchell County Chamber of Commerce has arranged for several fee sites to attend Saturday, but you must make your own reservations for these trips thru the C. of C. There are many local tourist gem mines offering salted material. Two very nice shows at the Pinebridge Center and outside at Grassy Creek. Web site: www.sprucepine.com and the C of C's new site www.ncgemfest.com

When you search either website be aware there is much information out there that goes back many years. It can be difficult to distinguish the current information from years past. The dates are a week later this year.

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

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

An Official Field Trip of Gem and Mineral Society of Franklin, NC (Franklin, NC) (HOST)
An Official Field Trip of the (Gem & Mineral Society of Lynchburg, Inc. and Roanoke Valley Mineral & Gem Society, Inc.)

10:00 AM to 2:00PM Saturday, July 9, 2011
Pacesetters Camp, Marble, North Carolina

WHERE: Pacesetters Camp; 562 Fairview Road; Marble, NC (Please see attached map.)

WHEN: Saturday, July 9, 2011; 10 a.m. to 2 p.m.

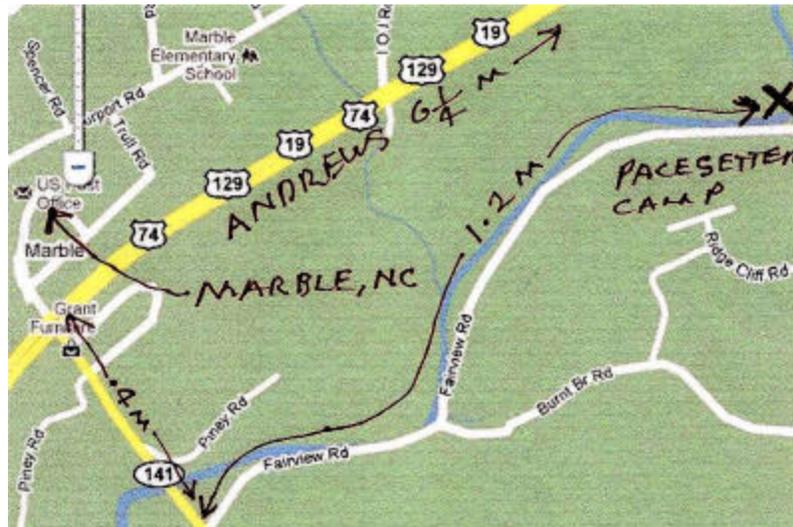
COLLECTING: Staurolite crystals (some maybe be twinned)

EQUIPMENT: Shovel, bucket, half-inch screen (crystals will be in the river).

GENERAL INFORMATION: No admission fee. This site is being made available by the pacesetter organization and has agreed to allow us to use the restrooms and parking area. Bring a lunch and beverage (no alcohol). Dress according to working in a river; high boots would be handy.

Contact Info: jfhayes@dnet.net or phone **828- 524-8062**

John Hayes, Field Trip Chair The Gem & Mineral Society of Franklin, North Carolina, Inc.



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Dixie Mineral Council Field Trips *Continued from page 6*

**An Official Field Trip of The Columbia Gem and Mineral Society, Inc., Columbia, SC (HOST)
An Official Field Trip of the (Gem & Mineral Society of Lynchburg, Inc. and Roanoke Valley
Mineral & Gem Society, Inc.)**

**9:00 AM, Saturday, August 13, 2011
Thermal City Gold Mine – Union Mills, North Carolina**

Fee Area

The Columbia Gem and Mineral society, NC. would like to extend an invitation to fellow DMC clubs to join us panning for gold for genuine placer mining site in Rutherford County, NC. Thermal City Gold Mine consists of one mile section of the Second Broad River and about 80 acres of Placer Gravel Deposits, having one of seven veins from the mountain supplying it. Panning material is brought from the river by backhoe for you to pan. The gravel is not "enhanced or enriched". The gold found in the natural state; right where nature deposited it. Gold found as flakes and maybe small nuggets. Ample shade, parking and instruction in panning are always available when needed.

FEE AREA: The fee is \$5.00 to pan all day. The fee is \$50.00 for a front-end load.

CHILDREN: Children under adult supervision are welcome. Rocky Rockhounds with leader are welcome.

PETS: Pets are allowed on a leash.

Collecting: We will be collection gold.

WHAT TO BRING: Shovels and pans are furnished or you can bring your own. Other equipment is available for rent or purchase. For additional information on the site, including details about a "front-end Road" or overnight stay contact the mine at 82-286-3016 or visit the website at <http://www.thermalcitygoldmine.com>.

HISTORY: This is an unsalted site and many people have had success finding gold here. The mine's aim is to provide an authentic experience. The mine is located on the actual site of the earliest placers in Rutherford County. It opened in 1839 and has produced gold ever since then.

SPECIAL CONDITIONS: Camping facilities with full hook-ups to primitive on a first come first serve basis. Call 828-2863016. No drug, alcohol or fire arms are allowed.

The grounds are almost level and a short distance from panning to camping to restrooms.

DIRECTIONS FROM ASHVILLE, NC: From Ashville take I-40 east to exit # 85 (Marion/Rutherford); proceed south on US-221 for 8.5 miles to the Rutherford County line; the entrance to the mine is on the left (look for signs along the way). The mine address is: 5240 US-221 N Hwy, Union Mills, NC 28167. Travel time should be about one hour from Ashville.

Uncle Billy's Day 2011, at Riverside Park in Altavista, VA.

We had many members present for this Day and a half event. Setup began on Friday evening, and eager buyers made purchases of lapidary items or tried their hand at the sluce or geode cracker.

Saturday morning brought out more members, and some of the same ones from Friday to assist folks and share our knowledge about rocks, minerals, and our club activities. It was fun to see old friends as well as many new faces.

Workshops were held throughout the month of May, and many thanks are extended to all who were able to help out. Below are some photographs depicting the results of your hard work and dedication to our club.

Photographs were submitted by Dave Callahan and Don McIntyre. Thank You to all who came out to show support. If you enjoyed our booth, we hope you will join us for our activities at the Apple Festival~ and for those who missed this one, please watch for details on the Apple Festival in October. We would love to see *YOU* there!



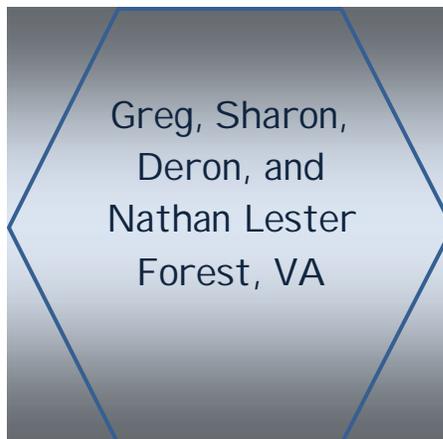
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Shop
Photo's
5/13/2011*



Uncle Billy's Day 2011, at Riverside Park in Altavista, VA.



Welcome New Members



Chocolate, Coffee and Eggs

By Elery Borow, Safety Chair, re-printed from EFMLS News, May 2011

Chocolate, coffee and eggs all used to be “bad” for us. Then they were “good” for us. Next they went back to being bad. Fortunately, the last time I checked, they are now and hopefully will stay on (assuming moderate consumption) the good list. Safety rules are another matter. Safety rules do not waffle forth and back as to whether or not they are good for us. It has always been and always will be good and proper for us to wear our safety goggles when hammering rocks. It has always been and always will be good for us to let others know our whereabouts when we go collecting; to bring a first-aid kit with us, to keep our tools in good shape; to wear proper attire for the task at hand; to handle acids with the utmost caution; and –well, I could go on but I think you have the general idea.

It is indeed true that things change. For example, hammer metallurgy will improve, but it will never be wise to use a nail driving hammer for hammering rocks. Different types of hammers are designed to do different things. Nail hammer metallurgy will improve but the hammer will still only be designed to hit nails, not rocks. The steel in hammers used to drive nails is not hardened the way the steel in rock hammers is hardened. To use the wrong hammer is to risk certain damage to the hammer but more importantly risk injury to ourselves.

Glove material will improve, goggles will improve, chisels will improve, and diamond drills will improve. Our hands however will always need protection and so will our eyes, toes, bare arms, and so on. The technology will change but for the foreseeable future there will be a continuing need to protect ourselves.

We sometimes think of risks as not applying to us. Here in Maine we may think of rattle snakes, scorpions and old mine shafts as dangers for those folks who do their collecting way out west. Well, let me set the record straight. While the only scorpions we see in this state are usually encased in clear glass or plastic display domes, we should be mindful of the fact that the New England states do indeed have their share of dangerous snakes, including rattlers. One can also find extremely dangerous mine shafts, adits, loose talus slopes as well as shear rock walls and cliffs. Mine shafts and adits are never wise to explore. If you have ever seen any of those Discovery Channel or National Geographic programs about old mine, cave or similar underground exploration, you will have, no doubt, noted the most elaborate and extensive preparations needed for those explorations. Such explorations are best left to the professionals. The dangers are very real and the rules for working with, in and around them do indeed apply to us. Your safety should be of the utmost concern. Your safety matters.

Mineral of the Month

Zincite (ZnO)

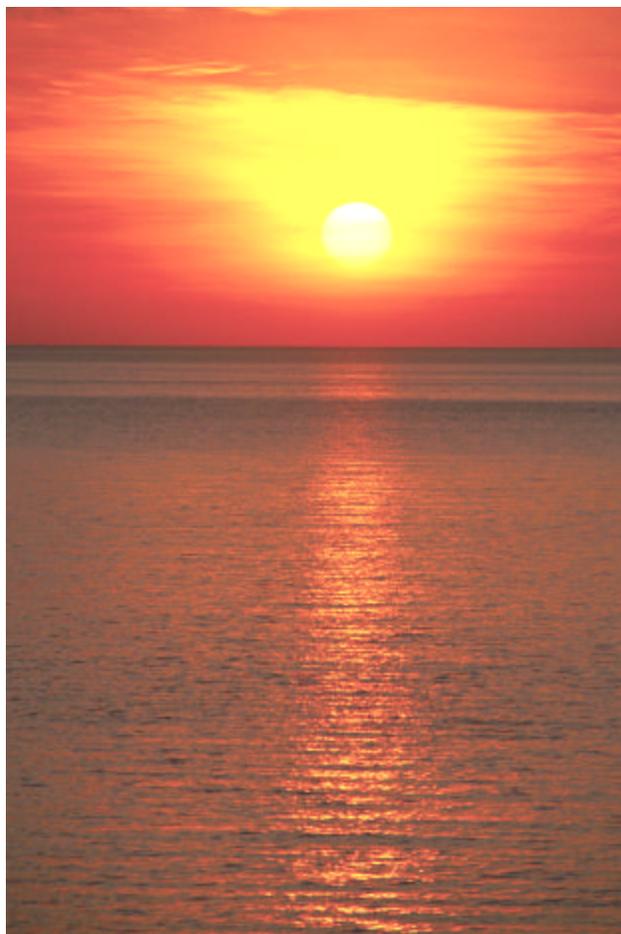
By Tom Prachar,

Reprinted from PEAS Rock News, May 2011

Zincite is a relatively rare mineral and is most closely associated with the zinc deposits of Franklin and Sterling Hill New Jersey. It has been reported sparingly from Olbersz in Kielee, Poland; from Bottino near Serravezza in Tuscany; near Paterna, Almaria, Spain; and at the Hazelwood mine in Tasmania. Zincite deposits are often produced as a furnace product of zinc smelting operations and can be attractive and highly fluorescent specimens but technically are not true minerals due to their unnatural origin. The Franklin-Sterling Hill, New Jersey deposits are the best known and only abundant world occurrence and are commonly associated with franklinite and willemite in calcite, usually in an intimate mixture. On rare occasions, crystals of pyramidal hemimorphic form, over one inch in size, can be found in ore or in cavities. Sometimes these crystals are transparent or sufficiently translucent to be cut as gemstones. Zincite was one of the major ores of zinc and was particularly used to produce zinc white pigment (zinc oxide). Pure zinc oxide is white but the common color of the mineral at the New Jersey deposits is a deep red to orange-yellow. This color is believed to be caused by the presence of manganese oxide. The striking color and interesting association occurrences make this material a favorite of collectors and another good reason for an exciting and enjoyable trip to the Franklin-Sterling Hill, New Jersey collection site and museums.



Sunshine News



Congratulations to all of our 2011 graduates. Club member Derrick Gordon graduated from ACHS this spring and will be attending VMI in the fall.

Please continue to keep Lloyd and Lucille Watson in your prayers as they continue to struggle with health issues.

If you know of any "sunshine news" please pass it along to the editor.

Up Coming Events

June 2011



Shows and Trips

July 1st-3rd:- Treasures of the Earth Gem, Mineral, Jewelry, Fossil, and Bead Show at Augusta Expo Land, Fishersville, VA. www.toteshow.com for information.

July 9th-10th:- Annual Show and AFMS/EFMS Combined Conventions sponsored by the Gem & Mineral Society of Syracuse, NY. EFMLS Annual Meeting Friday, July 8th. Visit the EFMLS website for complete details.

July 16th- 17th:- Annual Show sponsored by the Saco Valley Gem & Mineral Club. Conway Middle School, Conway, NH

July 31st-Aug. 7th Spruce Pine Weekend- Field trips, outdoor and indoor gem shows. Mark your calendar now- more information as we get closer to this date.

Sept. 17th-18th:- Annual Gem & Mineral Show sponsored by the Central Pennsylvania Rock and Mineral Club. Zembo Shrine, 2801 N 3rd St. Harrisburg, PA.



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

Websites to visit:

www.goldprospectors.org

Learn about the Gold Prospectors Association of America. You can also order gold prospecting supplies.

<http://www.diamonddanpublications.net/> great site for our Rock Raiders, club leaders, and teachers.

www.villagesmithyopals.com for those who enjoy opals.

Do you have a favorite website or know of one that may be of interest to others in our club? Please email it to the editor so we can all check it out.

Fundamentals of Lapidary...

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is with a rock hammer. As obvious as it sounds, many people slave over their saws when a few quick blows from a rock hammer would do the job.

Hammering rough does not allow precise control over the size pieces you get, although it is much more accurate than the dropping it off a cliff method. If the rock you are working on has a fracture, you can usually break it along that line.

Cutting a kerf in the stone will give you greater control. A kerf is a shallow saw cut, usually less than an inch deep. You can create a kerf almost anywhere you need it. Place a chisel or large screwdriver in the kerf and give it a solid blow with the hammer. The rock will split in two under the kerf. While the technique does not always give you a clean, straight split, it is surprising how well it works.

The above methods are only useful for cabbing material of moderate value. You would never want to hammer an expensive piece of rough where the loss would amount to much money. Nor would you want to use the technique on something fragile, like opal or calcite. Expanding fractures would reduce the usable areas and value of the material too much to be worth the savings in labor. For these materials, saws and tile nippers are called for.

Saws

Lapidaries use slab and trim saws. The difference is the size blade they use. Trim saws have small, thin blades that remove a minimum of material. Slab saw blades are thicker, because they are designed to do heavier cutting.

Trim saws use 4 to 6 inch blades that run between .004 and .012 inches thick. The cost will vary between \$25 and \$50.

Diamond blades are like a revolving finger nail file. They will not cut fingers, but they will give you a creative manicure if you are not careful. The exceptions to this are the very thin blades of .004 to .006 inches. At this size they will cut fingers. They are also much easier to bend, or dish, than a heavier blade. So unless you are cutting very expensive material, it is best to use a slightly thicker blade.

Slab saw blades run from 6 to 36 inches with thickness of .025 to .200 inches. A diamond blade will cost between \$30 for a small, medium quality blade, to well over \$1,000.



Other than size, the main difference in price is the amount of diamond on the blade. How much you need depends on how often you are going to use it. A hobbyist, who just cuts an occasional stone, can get by with any of the good quality blades. These have the diamond abrasive rolled or bonded on. A professional shop, which uses their saws constantly, would best be served with a sintered blade. Sintered means the rim has diamond throughout it, not just on the surface. Because there is so much more diamond in these blades, they cost considerably more. However, the value is there because they last so much longer.

Beware of very inexpensive blades. Some of them will only cut three or four stones and are not worth the money.

Mud Saws.

Not all slab saws use diamond blades. An older style is called a mud saw and they are still available as used equipment. A mud saw has no abrasive attached to the blade. Instead, the blade runs through a troth of abrasive, which is usually silicon carbide. This is the "mud." It carries some of the abrasive with it on each pass.

The primary advantage of a mud saw is economy; they cost much less than one with a diamond blade. Their disadvantage is that they require more maintenance. The abrasive breaks down with use and the saw must be shut down and recharged periodically. Properly set up and maintained, a mud saw works superbly.

Feed

When selecting and operating a saw you need to make sure the stones are fed straight into the blade. If you feed the stone to the blade at an angle it will bind and possibly bend, ruining an expensive blade.

With new slab saws, this should not be a problem. However, on a used saw you should not take it for granted. Check the feed mechanism to make sure it runs perfectly parallel with the blade.

With trim saws, you feed the stone in by hand. To do this properly, stand so your primary eye is in a direct line with the saw blade. This way you can see if the blade starts to bend, indicating you are not feeding the stone straight. Keep the table around the blade clean of debris, as bits of rock can deflect the stone. With small pieces, it is helpful to press them into a piece of cardboard, and slide the cardboard into the blade. On some occasions, you might even want to embed your stones in wax or plaster.

In all cases, you are

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Fundamentals of Lapidary ...

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instructed to hold the stone against the table as you slide it forward. No one has ever recommended hand holding the stone as you feed it to the blade. It is simply too difficult to feed straight and the chance of damaging the blade gets much higher.

That is what every saw manufacturer recommends. However, when trimming facet rough, it can be extremely difficult to both lay the stone on the table and feed it in a direction that removes a bare minimum of useless material. The price of good quality facet rough tends to be quite high and sawing off more than necessary is an expensive proposition.

As a rough dealer, I learned to feed stones into the blade by hand at whatever angle was best for preserving material. First, either find a line on the surface, or mark the stone where it needs cutting. Now, the main trick is to keep your eye in line with the blade. Hold the marked line on the stone straight to the blade. Feed it in gently and watch the saw blade constantly. If you see any bending, make a gentle but immediate adjustment.

There are also occasions where you need to saw a kerf in a stone that is too large to feed through your saw. The only way to do this is to set one end of the rock on the table and a side on the blade. Then gently rotate it forward until a suitable kerf is cut in place. Again, keep your eye in a straight line with the saw blade and make sure it doesn't bend.

Do this at your own risk. If you do not have a keen eye, a steady hand, and an adequate attention span, you will ruin your blade.

Lubrication

Trim saws will work and last well without any lubrication other than water. However, that is not necessarily recommended. At the minimum you should add a rust preventative. There are commercial products available where saw blades are sold. These usually have a lubricating properties as well, which is all to your advantage.

Slab saws have much more stringent requirements. There are saw oils on the market that are excellent, if a bit on the expensive side. If you are unsure what to use, get an oil that is specifically designed for lapidary use.

Lapidaries have used a variety of lubricating solutions over the years. One of the most popular is a combination of kerosene and motor oil. While it serves its lubrication purposes well, it is both toxic and flammable. There are water-soluble oils that are designed for use in machine shops. These do away with the flammability problem and

are much less toxic. Several people like to use automotive anti-freeze.

Bear in mind that all of these substances are toxic to breathe and there is always mist when the saw is in operation. When setting up a saw make sure there is adequate ventilation. If you are using a flammable solution, outside is best. You certainly do not want the fumes collecting in a closed room while you are away! I have seen some excellent workshops set up in a carport or under an awning.

Cleaning

Before throwing out a blade because it no longer cuts, try cleaning it by sawing a common brick. It is amazing how much this can extend the life of your blades. It removes tiny particles of grit that have accumulated between the diamonds. Harder stones, like agate will not do the same job.

Periodically, you will also need to clean the sump of your saw. Fortunately, it doesn't have much odor, because it is one of the nastiest jobs you will ever undertake. You need a large can or bucket to hold the residue, scrapers and rubber gloves to protect your hands.

Open the valve, or tip the saw to remove the lubricant. If you run it through a filter, (coffee filters work,) you can reuse it.

There will be a layer of sludge left in the bottom that needs to be manually scraped out. Any flat scraper will do, but a putty knife works particularly well for getting into corners. You do not have to remove every last bit of sludge, but the more you get out, the longer it will be before you have to clean it again.

Now all you have to do is to find a home for the mess you removed from your saw. The stone residue is nicknamed "the plumbers best friend" because it takes so little to plug up a drain. So that method is out. Most likely it is mixed with a toxic petroleum product, so you should find a hazardous waste disposal site. These are getting easier to find and many now exist at the local dumps.

Nippers

Tile nippers are available in all hardware and building supply stores. Their usefulness is limited, but in the right circumstance they are excellent.

Nippers are used almost exclusively for removing small amounts of material from facet rough, or edges of capping material that has already been slabbed. Simply place the



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Who knows, maybe we will learn something from you. At the time of this article we are preparing to go to Uncle Billy's Day Festival for a day of learning, fun and fellowship with Club members. If you can't make this date we look forward to having you join us for the Apple Harvest Festival at the Amherst Co. High School in mid October. We will announce workshop dates at the June meeting and every month afterwards. We will need some help getting ready for future Festivals so come on out and join us. You could learn how to make a Rock Pet or fashion a Gem Tree.

I hope you can stay cool during this heat wave and I hope to see you all at the June 15th Club meeting.

Keep Looking Down,
John Haskins

FOR SALE

Cab Equipment (Lortone) Rock & Gem Magazines

1. Lortone brand, excellent quality cab machine, with saw, installed in cabinet with sink and electricity hook up for sale for \$1100.00
2. Rock & Gem magazines from Vol. 1 #1 thru the present, about 425 in all. Price \$375.00

If interested please contact Gary E, Jackson, at mastersman@bellsouth.net or call 404-290-9064. You can also see a photograph of the cab machine setup in the June 2011 issue of Tips and Trips, www.gamineral.org

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blade of the nippers on the area to be removed and give them a squeeze.

This is usually faster and more efficient than using a saw. There is no preparation or clean up afterwards. On fractured gems, you can press on the fracture and cause it to finish splitting all the way through. This will save you more material than the most careful sawing, as the fracture may be a curved line. A saw can only cut in a straight line and you always lose the width of the blade.

This is an excellent method for preparing tanzanite for faceting, where removing fractured areas is one of the most common steps. With the nippers you will frequently get a large piece with maximum recovery, and a smaller piece for melee. If you use a saw, the primary piece will be smaller and you will lose the small gem altogether. When the material is this valuable, all of it is worth saving!

Grinders

The coarse wheels on a capping unit are also helpful for reducing rough to a useful size and shape. Indeed, that is what they are designed for. A saw is faster for removing large amounts of material, but a grinding wheel will give you more control. You can cut curves with a wheel, where you are restricted to straight lines with a saw.

You must be careful when grinding delicate material. A coarse wheel that is ideal for jasper would shatter an opal. It can also open up dozens of fractures in stones with perfect cleavage. Always think about the stability of your gem before taking it to a grinding wheel. If you are in doubt, either practice on a piece of junk, or start with a finer grade. Certainly do not drop your opal off a cliff.

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!



*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!*



ON THE WEB: Lynchburg Gem and Mineral Society: www.lynchburgrockclub.org

The SFMS Newsletter, the Eastern Federation Newsletter, and the AFMS Newsletters are available for all members

to read on line at the Federation Websites:

www.amfed.org/sfms, www.amfed.org and www.amfed.org/efms