

Gem Cutters News



Award Winning Bulletin of the Gem Cutters Guild of Baltimore, Inc.
Baltimore, Maryland

Volume 60, Number 3

March, 2011



Program Notes

from Mary Keller

With the cancellation of our February meeting we missed the chance to hear about Dave's adventures underground, so as a result, we'll try again this month.

Who would have guessed that exploring caves would have any connection with the Gem Cutters Guild? Well, at our next meeting you will find out exactly how.



For over 17 years now, one of our members has been exploring caves. What he does is not spelunking, but caving! His latest underground adventure has taken him into one of the most gorgeous and historically significant caves on this side of the Mississippi. Grand Caverns, once owned by President James Madison, is the oldest

commercial show cave in the United States. It's located in the Shenandoah Valley of Virginia and in 2006, as part of its 200th anniversary celebration, a newly discovered extension of the cave was opened to cavers. Our speaker has helped produce a DVD that shows off the discovery and exploration of this area which he will share with us at the meeting on March 1st.

This new extension is out-of-this world incredible. The area contains huge multi-colored calcite draperies, pure-white flowing "streams" of calcite; calcite "shields" that are extremely rare, plus lots of other wonderful formations. This area is off limits to the public, so the only way most will be able to see it is through this DVD.

Last Call for Dues!

by Steve Weinberger



Our bylaws specify that those not renewing by March 1 will be dropped from membership in the Guild. That deadline is fast approaching and we'd all really hate to lose you as a member.

With our new and invigorated Guild, and all the activities being planned for the coming year, we believe our membership dues are a terrific "deal". President Mary and the Board are planning exciting and interesting programs, Dave and the workshop committee have already made major improvements to the workshop with more to come, our club bulletin continues to bring you informative articles each month, our website is finally being revised and maintained, our classes continue to be interesting and varied, and much, much, more. Please, do not allow your membership to lapse.

Dues remain at \$18 for individuals and \$30 for families plus \$35 per person for those wishing to take advantage of our open shop dates. Please take a minute and fill out and sign the form on page 17, write your check and either bring it to the meeting on March 1 or mail it to me by then. Details are on the form.

Still No Coffee Breaks Chair... Help Silence The Growling Stomach!



We need volunteers to bring refreshments to our March meeting!

No food = growling stomachs during the break.

Won't YOU help?





The Gem Cutters Guild is a founding member of the Eastern Federation of Mineralogical and Lapidary Societies, Inc. and affiliated with the American Federation of Mineralogical Societies.

About our Guild:

The Gem Cutters Guild of Baltimore, Inc. was established in order to allow its members to gain knowledge and skills in gem cutting, jewelry making and in identifying and evaluating lapidary materials. Through field trips, exhibitions, and cooperation with other societies, we endeavor to further not only our own knowledge, but also that of the general public.

Meetings are held on the first Tuesday of each month except January, July and August at our workshop which is located at Meadow Mill at Woodbury, 3600 Clipper Mill Rd, Suite 116; Baltimore, MD 21211. Meetings begin at 7:30 P.M. Visitors are always welcome. Dues are \$30 per year for families and \$18 for individuals. More information and directions to our meetings can be found on our website, <www.gemcuttersguild.com>.

Officers:

President - Mary Keller
info@gemcuttersguild.com

Vice President - Joe Gehring

Recording Sec'y -

Corresponding Sec'y - Trinh Phan

Treasurer - Steve Weinberger

Past President - Richard Meszler

Directors:

2010 - 2011	2011 - 2012
Pauline Furtaw	Wayne Homans
Richard Hoff	Anne Millar
Sallie Miller	Dave Mitchell

Editor:

Carolyn Weinberger
PO Box 302
Glyndon, MD 21071-0302
410-833-7926
<cscrystals2@verizon.net>

Deadline is the 15th of each month
Non-commercial reprint permission
granted to non-profit organizations
unless otherwise noted.

Thoughts From My Rockpile

by Mary Keller, President



I was looking forward to the February meeting and the presentation on caving. By noon on the first the weather did not look promising, so the meeting was cancelled for the safety of all.

If you have not checked out the revised web site please take a look. There will be additions, but the information is current and the appearance is great. Many thanks to Emily Brooks and Adam Block for their hard work.

Thanks also to Cathy Yastramski, who has volunteered to be the Librarian, and to Pat Baker who has agreed to continue as Sunshine. Tricia MacNeal and Jane Fallon have resigned from the board. Trinh Phan has volunteered to serve as Corresponding Secretary. The office of Recording Secretary has not been filled as of this writing. There is still a need for chairs for the Publicity and Refreshment Committees.

Late January and February were months of losses with the passing of long time member Donald Gerbick, Tricia MacNeal's cousin and Richard Hoff's father. My apologies to anyone missed that also had losses this year. Hopefully, the weather and other things will get better from here on. Some great classes are coming up and there is the show in September.

Winter Weather Advisory

If Baltimore City schools are closed or close early, our meeting will be cancelled. You can obtain this information by tuning to WBAL radio (1090 AM) or most TV stations. You usually can also find it on the web at <wbaltv.com>. We'll also try to put out a notice via the Guild's Yahoo Group e-mail list.



Should a workshop class need to be cancelled, students enrolled in the class will be notified directly by their instructor.

Welcome Back

from the Board of Directors

We're pleased to welcome back Gracye Johnson as a member of the Guild. Her e-mail is <atouchoofgracye@yahoo.com>

Her complete information will be in the new Guild Roster which will be sent out early next month.

Dollars and Cents

by Steve Weinberger



At its January meeting, the Board of Directors approved the budget for FY 2011. Most committees were given a budget for the coming year as follows:

Guild Committees:

Sunshine - \$100

EFMLS Dues - \$175

General Fund - \$900

(includes ALAA membership, tax prep., review of financial records, Convention stipend)

Insurances - \$460

Library - \$250

Programs - \$500

Publications - \$1,200

Publicity - \$450

Scholarship - \$325

Social - \$625

(including coffee breaks)

Website - \$400

Workshop Expenses:

Rent - \$10,000

Utilities - \$1,200

Insurances - \$800

Maintenance - \$600

Property Tax - \$700

Class Mailing - \$1,500

General Fund - \$200

Tools & Equipment - \$2,000

A reminder to all members - only committee chairs are authorized to make purchases for their committee. Receipts, clearly showing items purchased must be presented for reimbursement in a timely manner.

Meeting Minutes

Since our meeting for February was cancelled to to the weather, there are no minutes or meeting recap for this month.

Birthdays

from Linda Goldberg

Happy birthday this month to:

Martha Rinker (3)

Debra Amend-Libercci (3)

Cindy Blackburn (13)

Pat Baker (31)

Birthstones for March include Aquamarine (a variety of beryl) and bloodstone (a variety of chalcedony).



Sunshine

from Pat Baker

I've learned that Sydney Berlin fell and broke her wrist last month. Sure hope you knit quickly!

We lost one of our stalwart members with the passing of Donald Gerbrick, Sr. on February 11th. Don Jr. found him just sitting peacefully in his chair. Several members of the Guild attended the viewing and funeral services.

Richard Hoff's father passed away on February 6th after a long illness. Several members of the Guild also attended the funeral and Shiva house.

Our condolences to Richard, Don, Jr. and their families.

Board Notes

from the Board of Directors

The Board of Directors met on Friday, February 18. Pres. Mary announced the resignations of Trish MacNeal and Jane Fallon from the Board. Trinh Phan was approved by the Board as Corresponding Secretary. A search is on for someone to fill the office of Secretary.



Richard Meszler reported that the class line-up for spring is ready to be sent to the printer and that the Guild would be hosting a PMC Certification class given through Rio Grande and a Texturing class in addition to our normal group of classes.

Dave Mitchell reported that he and Richard were looking at several pieces of used equipment which, if they are in good condition and can be obtained at an affordable cost, might be acquired for the workshop.

Mary reported that she was forming an ad hoc committee to look into possible additions to our website.



**Last Chance
to
Renew Your Membership!**

Donald Gerbrick

October 11, 1935 – February 11, 2011

Donald Gerbrick was a quiet, unassuming man. His value to our organization cannot possibly be measured. He joined the Guild in 1991 after taking a class in cabbing at our City College based classroom. He quickly befriended several in the Guild, impressing all with his knowledge and keen interest in learning all that he could about lapidary and jewelry fabrication.

In 1995, when the Guild decided to move to our current Meadow Mill workshop, it was Donald who single-handedly worked at the old shop, sorting through 50 years of accumulated "stuff"; throwing out no longer usable buffs, chemicals, broken equipment, parts, etc. and sorting the "good stuff" so that the committee charged with the move could evaluate what would



be taken and what would not be. Once the decision of "what" was made, Donald spent his time packing the tools, dop wax, chemical bottles, slabs etc. Once the move was complete, Donald was there again, helping to put things in their proper place in the "new" shop. When asked by the Board, he immediately agreed to serve as Open Shop monitor, coming to the shop every Saturday and Sunday so that members who had paid their shop fee could work. He also volunteered to be the workshop foreman and kept our equipment clean and in top running order.

In those early days at Meadow Mill, most of our instructors were not Guild members and Donald volunteered to be the TA - opening and closing the shop for the teachers, helping with their equipment needs, and even occasionally assisting with helping students. Two years or so after we opened Meadow Mill, Donald also felt proficient enough to teach the cabbing classes - a move that turned out to be most beneficial not only for the Guild, but also for his students. He was patient, knowledgeable and provided just the right touch of humor to keep everyone in the class happy. He held these positions for years, only stepping down as his eyesight began to fail and driving, especially at night, became difficult. He also served on the Board as a Director, and worked 2 full days at the demo area of the show for many years.. For his long-term contributions to the Guild, Donald was awarded the Anderson Trophy in 2007.

"The Donald" went to Wildacres twice. On his first trip he came to learn how to facet (the Guild wasn't yet teaching faceting). I was in the class with him at the time, and quickly learned that before coming, he'd spent hours researching the faceting process. When he was given an instruction, for example, "set the angle to 43°", Donald would ask, "if I set this to 42°, what happens to the brilliance of the stone?". Few, if any beginning faceters have that understanding, but Donald had done his research and was curious about the "whys" of the process so that he could cut a better stone. He soon purchased a machine and produced several excellently cut gems to accompany his numerous well cut cabochons.



I wonder what I would look like with hair?

Another side of Donald that most in the Guild did not see were his other interests. A mechanic for Greyhound Bus, his talents gravitated to auto racing, and he and his son, Donald Jr. fixed up an old Dodge (or maybe a Plymouth) and won several trophies for it. He also loved model trains, and took countless photographs of family, our workshop activities and of course in later years, his beloved grandchildren Zach and Leah. Cards flooded the mailboxes of friends over the years as he remembered birthdays, anniversaries, and holidays, the last arriving in our mailbox just this last December.

Donald was a caring, selfless and generous human being. He'll truly be missed by his friends, the Guild and certainly by his family - son Donald Jr., daughter-in-law Carrie and grandchildren Zach and Leah.

Carolyn Weinberger

Safety Matters - Radioactivity

by Ellery Borow, Safety Chair



When I asked EFMLS President, Betsy Oberheim, if she had any thoughts about subjects of interest to her for future safety articles, she related a story that really troubled me. Earlier, I'd heard a few similar stories from Kathleen Collins, our EFMLS Region I Vice President. Since then I have gathered more stories of equally great concern ... all about the same subject. The subject of concern? Radioactive minerals.

The stories I've heard go something like this: A knowledgeable collector goes up to a dealer's table and comments about what an extraordinary and large specimen of cuprosklodowskite they have on their table. The collector asks why it is so prominently displayed and unprotected on their table, especially with it being such a highly radioactive mineral. Dealer responds that it is not dangerous. Collector thinks, well, I would not want that specimen anywhere near me for any length of time, and walks away. This particular mineral specimen, so prominently displayed on the dealer's table, was relatively large and had the flaming green, fuzzy look of a typically "hot" specimen. Who was right in their opinion of the mineral's safety - the dealer, or the collector?

Maine has quite a few minerals containing uranium. We often see interesting halos (radiation burns) around a dark spec of material in some of the minerals we collect. Over the years, I have heard a great many do's and don'ts with respect to collecting minerals with traces of uranium

and other radioactive elements in them. I recently asked myself which radioactive minerals are safe to collect and which ones require special precautions when collecting and storing in ones collection. As I am not in the habit of talking to myself, I did not have an answer.

A friend of mine in Connecticut is a collector of radioactive mineral specimens so I asked him a few pointed questions about the subject. He and I chatted at length about: dangers; protections needed; handling, shielding and storage; daughter elements, salts and oxides; alpha, beta, and gamma particles; and so on. At the end of our conversation I asked him if there were any authoritative articles, books or other sources of information about radioactive minerals I might read to be better informed. His answer was disappointing. He knew of no single source of comprehensive information about collecting and storing radioactive minerals.

Over the next few days I voraciously reread my many mineral reference books specifically researching a few minerals that typically vary from just barely above background radiation levels to levels that require substantial precaution when handling and storing. The minerals I researched were autunite, betafite, beta-uranophane; cuprosklodowskite, samarskite, uraninite, and uranophane. A great amount of information was to be had in the reference literature regarding crystal systems, habit, color, hardness, optical constants diffraction lines, lattice constants, and chemistry. No mention was made of radioactivity, handling precautions, or storage requirements. The books were very authoritative and informative except with regard to the ques-

tions I carried and that mattered most to me in my search.

My friend's comment at the tail end of our conversation had finally hit home. The best way to know which minerals required the most caution would be to become knowledgeable about mineral chemistry (and the various radioactive elements and daughter elements) and have specimens in question checked by someone who has use of and is knowledgeable in the operation of a Geiger or scintillation counter. There are numerous means of safely storing commonly available radioactive mineral specimens (light metal shielding water jackets, exotic metal storage containers, to name a few) but each specimen must be evaluated to determine its own requirements.

Unless specifically sought, rare and exotic radioactive mineral specimens don't usually find their way into the average mineral enthusiast's collection. But if there is a question about a particular mineral's radioactivity it would be wise to check out any minerals of concern with a Geiger or scintillation counter and then respond accordingly. The best advice one can offer is to ask the pertinent questions and be the knowledgeable collector. It has been my experience that dealers are often reasonably knowledgeable about their wares.

Oh, the answer to the question as to which one was right, the knowledgeable collector or the dealer, is that the collector was right. The dealer apparently had not properly informed himself of the radioactive nature of his cuprosklodowskite specimen. The knowledgeable collector was right in

see Safety on page 6

Two Special Classes

from Richard Meszler

Two very special classes are being offered at our workshop this coming April. The first, a PMC Certification Class is being offered through Rio Grande and will be taught by Barbara Baker Simon. The 3-day class will be held on Friday, Saturday and Sunday, April 8 – 10 at our workshop. Registration is being handled by Rio and can be accomplished by going to <www.riorewards.com/schedule.asp> , going to the bottom of the page and clicking on "more information" on the Baltimore class line.

Participants who take the class will be certified to teach PMC and will also be able to purchase PMC products through Rio at a discount. Registration also includes a 1 year membership in the PMC Guild. Prior experience with working PMC is needed. Registration deadline is in early March, so do not delay.

The second class is a texture plate workshop that will also be taught by Barbara Baker Simon at our workshop on Monday, April 11. In the class students will learn to make their own texture plates to use with either metal or polymer clay projects. You'll learn to make molds of textures, carving and photo polymer plates. Participants will take home an example of a texture plate and learn the best ways to use them.

Registration for this class will be through our normal Guild class registration process with more information and costs available via our class flier which will be out in early March. Registration deadline for this is also in early March, so do not delay. We must have a minimum of six students for this class to be held and will only take place if the PMC class is a "go".

From the AFMS President-Elect

by Lauren Williams, AFMS President-Elect from AFMS Newsletter, March 2011

It is time to make our reservations for the AFMS/EFMLS Show and Convention. As a reminder and for the new individuals on the block, when making your reservations with the Host



Hotel, deal directly with the hotel/motel that is the show headquarters. When someone makes reservations by blocking-off a group of rooms, he/she is literally sticking out their necks by buying a block of rooms. That hotel/motel then notifies their national office that a block of rooms has been sold. When you call that national office, 1-800-number, their computer says that all of the rooms have been sold and that no rooms are available for those days. When in fact there are unsold rooms at the host hotel you want to stay at. I have heard people say "We had to find someplace else to stay, I called the 1-800-number and they said that all the rooms were sold!" I have seen one club get stuck for paying for empty rooms.

The same goes for meals. We do not know what deals the host club made with the hotel/food vendors. Let the host society know as soon as possible if you cannot make a meeting involving food. I have also seen people have to pay for meals for those who did not show up. This information applies to federation and local clubs meetings and conventions as well. And when you make that reservation make sure that you mention that you are with that show and convention in order to get the room rate.

This convention will mark our

64th annual meeting, and the host club, the Gem and Mineral Society of Syracuse will be celebrating their Diamond Anniversary. The convention hotel is the Ramada Inn, Buckley Rd, Syracuse, NY and their direct number is 1-315-457-8670. Now if you will excuse me I have to find a registration form and make a phone call to Syracuse, NY.

[Ed. Note: The Guild is entitled to two voting representatives at the EFMLS annual meeting which is scheduled for Friday, July 8th at 7:00 pm. To help offset some of the expense of attending, the Guild has budgeted \$200 per representative. Delegates would be required to attend the meeting and the Saturday evening Awards Banquet. If you are interested in being one of the delegates, contact Pres. Mary.]

Safety

continued from page 5

assuming there were many special precautions needed in that mineral's display, handling and storage. The lesson - be the knowledgeable and cautious collector.

For this month's review of an important safety matter please check out Jim Doran's great article on winter field trip plans in the March 2010 issue of the EFMLS News. It is, after all, still winter.

Don't have a copy of the article? It may be found on the EFMLS website www.amfed.org/efmls. Click on the 'Newsletter' tab and then download the issue. It will arrive as a pdf file.

Dendrites vs. Moss Agates: Orbicular Jasper vs. Polka Dot Agate

from *The Petrolglyph*, June 2003 via *Palomar Gem*, February 2011

We are usually delighted, but not surprised to find inclusions in crystal, eg.. quartz of one color or another, rutile, sagenite and "stars". The appearance of inclusions is obscured, our imagination takes hold.

Chalcedony (clear to cloudy), agates (clear but usually banded) and jasper (opaque) are all variations of silica oxides, with hardness between 6 and 7, which makes them very suitable for polishing. They may all have included material, and the nature of the inclusion is dictated by the composition of the host rock material and the manner of rock formation.

Dendritic chalcedony and moss agate are terms or names frequently applied to the same material. They are basically similar, but dendrites can form not only in chalcedony and agate, but also on limestone and soapstone and some sandstones. The dendrites form on a surface and are two-dimensional, like snowflakes or frost crystals on a windowpane. If the rock is chalcedony, the dendrite forms on the surface, but more chalcedony may entomb it. The dendrites are usually earthy, black, brown, or reddish, but near Four Corners, in the eastern Mohave, near the junction of Hwy 58 and Hwy 395, rockhounds reputedly find blue.

The "mosses" of moss agate, not organic material at all but chlorite or celadonite are visible impurities in agate. Scientists attempt to distinguish between the two by determining, if possible, whether the dendrite/moss or the material rock formed first. The moss forms while chalcedony is still gel like and can then form three-dimensional shapes with the stone. Moss agate, also

widely distributed, can be a variety of colors, green, black, white, red, orange, and tan. It is widely used in jewelry, and polishes beautifully, if care is taken not to cut into and pluck the moss.

Multi-colored balls can appear in rhyolite flows. Rhyolite is a fine grained igneous rock, if it contains sufficient silica to take a brilliant polish, and is sometimes called jasper. Orbicular material usually appears as a mass of rhyolite that has silicate. As the rhyolite cools, sometimes excess silica starts to precipitate out of the magma, forming spherical balls. The ball shape is the form that is extremely concentrated silica (cristobalite) takes, as opposed to the crystal form in dilute concentrations. However any material that by composition or consistency is immiscible (not mixable) with the host magma will also form balls.

Regional metamorphism can also form orbicular jaspers. We hear

names like Rainforest Jasper from Australia, Leopard Skinned Jasper from Mexico, Poppy Jasper from California, and Ocean Jasper from Madagascar. We may find one color surrounding another, or bands of balls, veils of lighter colors staining the background. Polka Dot Agate, from Oregon, has iron rich spheres floating in a snowy, extremely fine-grained jasper, along with veils of golden brown. The material is so fine-grained it is almost chert and resembles porcelain.

The rock distinction of jasper and chert is: if it's attractive, it's jasper; if it's dull, it's chert. Some jasper represents replaced limestone or dolomite, some occurs as nodules, and sometimes it is part of the gangue of mineral deposits by hydrothermal or metasomatic processes.

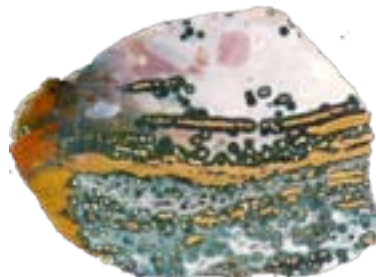
Agates are translucent and usually banded, with sub-vitreous luster; Jasper is opaque with a dull to pearly luster; to a rockhound, jaspagate is a fine mixture of the beautiful oxides.



Dendritic Agate



Moss Agate



Orbicular Jasper



Polka Dot Agate

Petrified Wood...Or Not?

by Regina Kapta, from *CentrILL Gems*, January 2011

When is what you've found petrified wood or just a rock?

Sometimes it's easy to tell..the rock is very heavy and may look like a piece of wood, complete with bark, tree rings and clear wood characteristics. Those are the pieces that jump right out at you. At other times, the rock may have been tumbled in streams and rivers for centuries and have just a few hints of what it originally was. Those need a closer look.

Petrified wood is a special type of fossil where the original organic material has been replaced by minerals, often chalcedony and quartz, and sometimes opal. The minerals retain the structure of the wood where you can often see actual cells, tree rings and other aspects of the tree, all transformed into stone. This transformation process is called permineralization and takes place when a tree is buried under sediment and protected from oxygen and decay. Swamps are great places for this to

happen as the bottom mud and clay forms a seal over any organic matter lying on the bottom as it slowly sinks down, protecting it from oxygen. Water seeping thru the mud contains minerals and as these minerals move into the plant's cells at the microscopic level, they slowly decay the actual cell but leave a stone mold or representation in its place. Wood takes about 100 years to petrify, and, no surprise, is a 7 on the Mohs scale just like quartz.

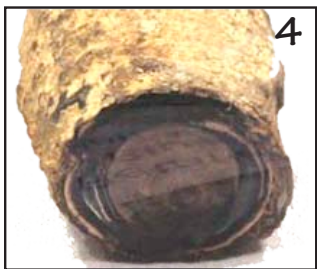
Different minerals in the water contribute to various colors in the petrified wood. Quartz is usually colorless, but trace minerals can change the color to green and blue from cobalt, copper, and chromium; red and yellow from iron oxides; pink and orange from manganese; and black from carbon and manganese oxides. There are some ways to determine whether you are finding petrified wood. First, look at it carefully. Any indication of bark along the edges? This could show up as a different

color or texture from the inner areas of the rock. Limb casts (center) often look like a part of a tree branch with the petrified wood surrounded by bark remnants.

Are there any signs of tree rings in the center, or rays going from the center to the edges? These may stand out as a different color when the mineral concentration differed as the cells changed function when the tree was alive. They may also be distorted as the pressure on the wood increased with more and more layers of mud accumulated over the years.

Look for small circles indicating a cell structure. Some can be very obvious like the tree fern from Brazil that has very pronounced cells (#6 next page). For others you will need a loupe or magnifying glass, depending on the type of wood species as many have very small cell structures, especially the hardwoods, that have

continued on page 8



#1 Petrified wood polished by wind and sand. Chinle Formation, Utah

#2 Bog wood from Trout Creek, McDermit Oregon showing strong green color

#3 Sycamore with densely packed trunk and growth rings. The edges show a layer of chalcedony (translucent white) growing similar to geodes and agates.

#4 Limb cast from Eden Valley Wyoming shows remnants of bark as the wood inside the limb was replaced.

#5, fir specimen showing distorted growth rings



Petrified Wood...Or Not?

continued from page 7

very dense and compact trunks. You can also find bore holes from insects in the trunk that occurred when the tree was alive.

A well known type of petrified wood is the conifer '*araucarioxylon arizonicum*' that is now extinct, but thrived at one time in what is now Arizona. This is the state fossil of Arizona and is spectacularly colored red, orange, yellow and sometimes purple. This is the species that makes up much of the Petrified Forest National Park (below left) and many massive tree trunks have been found weathered out of the surrounding rock. This layer of rock is known as the Chinle Formation, as this was a tropical forest in the Triassic. This species of tree grew to 200 ft. tall and had trunks about 2 feet in diameter. Often this

type of petrified wood is called "Rainbow wood" because of the variety of colors from iron oxide, limonite and hematite.

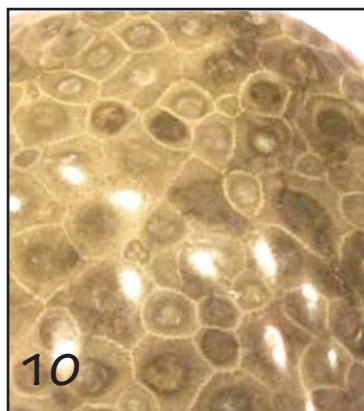
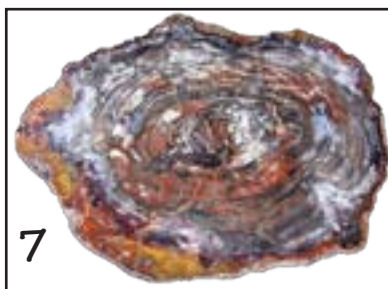
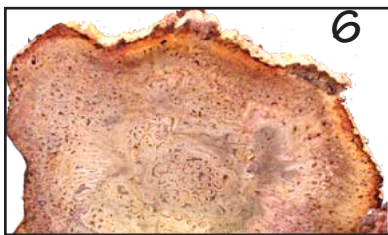
Another well known type of petrified wood often found is palm wood '*Palmoxydon*' (Photo # 8 and 9) and this is from many locations world-wide, such as Egypt, South America and along the Gulf Coast. Scientists have identified several distinct species. Petrified palmwood has some identifying characteristics that show up as rods, spots or lines, and has a variety of colors. The rods are bundles that were part of the woody tissue that gave the tree it's vertical strength. This wood is hard enough to polish and can be used in jewelry. Native Americans used this for projectile points such as spears and arrowheads, and

awls and other tools.

When is petrified wood not petrified wood? Petrified dinosaur bone can sometimes be mistaken for petrified wood, especially if it's just a small fragment and has a clear cellular pattern (lower left). Another fossil-type rock that is sometimes mistaken for petrified wood is Petoskey stone, which is a fossilized coral found in Michigan (lower right). Careful examination with a magnifying lens can help determine the difference. The pictures below are polished specimens which makes it easier to see how they differ, it's much harder to identify petrified wood out in the field. Another type of fossil rock that can be mistaken for petrified wood is this petrified sponge found in Wyoming. (# 11). Here you can clearly see the overall shape of the sponge and the lack of growth rings, however a fragment of this would be a challenge to identify.

Along with corals, sponges and dinosaur bones, there are 2 more fossil-type rocks that are often first identified as petrified wood. One is

continued on page 9



#6 Petrified wood from the Psaronius Tree Fern, Brazil, showing the internal structure of the tree

#7 Arizona Petrified wood from the Chinle Formation, showing a clear center and growth rings.

#8 Petrified palm wood

#9 Petrified palm wood

#10 Petoskey stone

Petrified Wood...Or Not?

continued from page 8

coprolite - dinosaur poop that has been replaced by quartz and, due to the variety of organic matter eaten, often contains a variety of colors. Here is coprolite from the Morrison Formation in the Henry Mountain, Utah (#12).

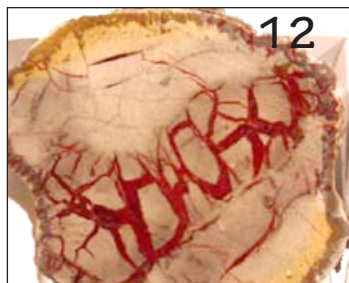
Another fossil rock is the stromatolite, a type of coral that grew in very distinct patterns and is found as Mary Ellen and other jaspers. Shown here are two types of stromatolite from Biwabik MN, Mary Ellen (#13) and Collenta Undosa (#14).

So, the next time you think you've found piece of petrified wood, look closely.

Reference:

Wikipedia ([http://upload.wikimedia.org/wikipedia/commons/d/da/](http://upload.wikimedia.org/wikipedia/commons/d/da/ArizonaPetrifiedWood.jpg)

ArizonaPetrifiedWood.jpg)



#11 petrified sponge

#12 Coprolite from Morrison formation, Henry Mtn. Utah

#13 Mary Ellen stromatolite from Biwabik, MN

#14 Collenta Undosa stromatolite from Biwabik, MN

Test for Topaz

from Rock Chipper
via Rollin' Rock, November 2010

Drop of Water Test for Topaz

Quartz and topaz are not easy to separate by eye, and are sometimes impossible when the quartz is a true topaz color. There is a big difference in price between the two and anyone describing quartz as "topaz", however innocently, may well be in trouble.

Topaz is quite a different mineral, which is harder than quartz. Because of this, a drop of water will not spread on topaz but will spread on quartz. Clean the stone as effectively as possible with a cloth or handkerchief to remove all trace of grease. It must be dry before the test. Then place a spot of clean water on it with a thin glass or metal rod.

On stones with a hardness of less than 7 on the Mohs scale, the water is dispersed. Oh harder stones it will remain a globule. The harder the stone the more rounded will be the globule.

Jewelers Polishing Wheels

by Brad Simon

Increase the size of your polishing wheels from the standard 4" wheel to a 6" wheel. This will cut polishing time by over $\frac{1}{3}$. Changing to a 6" wheel from an old wheel worn down to 2 1/2" or 3" will cut polishing time too less than $\frac{1}{2}$. This is due to the surface area of the wheels.

Although spinning at the same speed, more surface area moves over the jewelry in the same amount of time thereby polishing faster.

Collection Types

by Thomas Pallanta, Jr. from *Rock Chatter*, February, 2011

One of the great advantages of rock and mineral collecting is the range and variety of collecting that you can do. There are various ranges of generalized or specialized collecting. This gives the collector a considerable selection of activities. Here are some examples to guide you.

The General Collection

Just about everyone starts out this way. You quite simply collect whatever catches your fancy. Such collections are full of variety and many collectors stay on this particular route.

The Rock Type Collection

A collection like this is usually for the geologist or the serious amateur geologist. One collects rocks of the various types for study. The collection can be general for someone who is interested in learning the various geological processes. Then again, one can specialize.....like 'Volcanic Materials'.

The Single Mineral Species Collection

In this case one collects specimens of one mineral species in all of its known forms from as many locations from around the world. For example, I have a fifty specimen collection of smithsonites.

The Single Mineral Class Collection

Also called 'Single Mineral Family' collections. Here you collect all minerals of a specific mineral class such as sulfides, carbonates, oxides, phosphates, etc.

The Single Chemical Elements Collection

These are usually collections based on a single chemical element like copper, lead, zinc, iron, uranium, etc. In this case you collect all miner-

al species which have that particular element as their main component.

The Pseudomorph Collection

Pseudomorphs are minerals that have the crystal form of another species through alteration or chemical replacement. One example is pyrite replaced by limonite.

The Crystal Collection

In this case, one simply collects crystals. One can specialize in collecting the various forms of a single family like calcite or quartz. On the other hand, one can simply collect crystals from the various crystal systems (cubic, hexagonal, rhombohedral, tetragonal, orthorhombic, monoclinic, and triclinic). Then again, you could just collect whatever types of crystals that catch your fancy.

The Dana Collection

Here one strives to collect one of every mineral species listed in the table of "Dana's Manual of Mineralogy". This is usually a collection for the serious amateur mineralogist.

The Ore Minerals Collection

This is where one collects the various types of ores or ore-bearing minerals. One can specialize in collecting

a single family of ores such as copper ores. On the other hand, you could generalize. This is a good area of collecting if you have an interest in mining.

The Ultraviolet Minerals Collection

Also called 'fluorescent mineral collection'. Here a person specializes in collecting minerals that fluoresce under the ultraviolet light. You can collect all of the various kinds of fluorescent minerals or you could specialize. Some collectors try to get specimens of minerals from a single location like Franklin, NJ. Then there are people who specialize in minerals that only fluoresce under long-wave or short-wave ultraviolet light.

The Gemstone Collection

As the name indicates, you collect gem materials. You can collect a single family, like feldspar gems. One could also collect various types of rough gem minerals and crystals. Only the very rich tend to collect precious gems. That is the acme of mineral collecting.

These are just a few of the different types of collections one could enjoy. Remember, whichever collection type you choose, document your specimens.

Fabulous in Tucson!

by Carolyn Weinberger. Photo by Steve Weinberger

Among the many fabulous gems and minerals on display (and for sale) at the 2011 Tucson Gem & Mineral Show were several fabulous Chinese Rhodochrosite specimens. The Emperor, shown at left was the largest and measured about 2' tall. Estimated value of the Emperor is about \$8 million and no, we did not purchase it! We did however bring it home via our camera.



Making Filigree Jewelry - Part 6

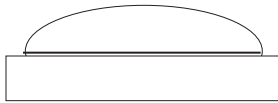
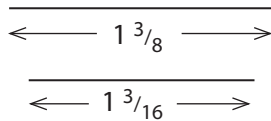
by Leon Hornstein. Reprinted from *Gem Cutters News*, October, 1992.

Original article used with permission of the Author

We can simplify the process of making filigree jewelry by duplicating a part or an outline an arranging duplicates in various patters to create many interesting designs. Use this method for your next few pieces. As you gain experience, proceed with your own innovations.

Refer to the diagram below 0 it is the outline used in all six of the next described filigree projects. The dimensions shown can be varied to suit your individual needs.

To make this outline, procure two pieces of No. 24 square sterling or fine silver wire. One piece should be $1\frac{3}{16}$ " and the other $1\frac{3}{8}$ " long. I recommend you carefully anneal these two pieces.



Form the longer piece into an arc or half circle. Then measure the distance from one end to the other. We want a distance of $1\frac{3}{16}$ ". If necessary, slightly bend or reshape the wire to obtain this dimension.

Now, pin the bent wire to the soldering board with medium or hard solder. Solder the $1\frac{3}{16}$ " silver wire to the two ends of the arc. Place the wire ends together squarely for better duplication. (It's a good idea to make an outline jig using dressmaker's pins and a piece of wood so you can quickly repeat this process.)

The disadvantage of making a jig

is that it is difficult to get a nice sharp corner, which is more pleasing to the eye, but the advantage is that by using a jig you only need to cut one piece of wire and make one soldering joint. If you use this method, the single piece of wire should be about $2\frac{3}{4}$ " long.

The finished frames should be filed smooth at the soldered joint or joints, straightened and then pickled and soldered. Then arrange the frames into pleasing patterns on your workplace. Once you're happy with

the arrangement, pin them down and solder them together. You then can fill the frames with tear drop and/or ovette units and then solder them into place. After pickling, any shaping or contouring you desire can be done. Stones, silver balls and findings can also then be added.

As you can see from the illustrations below, all three projects were made using the same frame in various patterns. You can create other variations using the same frame.



Using three outlines in an interesting pattern.



Four frames of identical dimensions



Instead of using four identical frames, two are slightly larger.

Polishing Jewelry

by Brad Simon

A solution to the annoying and potentially hazardous problem of breathing dust from polishing and rubber wheels used with your flex-shaft is to make a guard to fit your flex-shaft handpiece. This guard can easily and economically be made from a water or soft drink plastic bottle.

First, cutoff the top portion of the bottle. Then, cut a section off the side to create the hood.

Next, you need to make the inside diameter of the neck of the

bottle the same size as the diameter of your flex-shaft handpiece. If the bottle's neck is too small, cut a slit through it so that you can spread it open. If the bottle's neck is too large, cut a section out as if sizing a ring.

Next, carefully heat the bottle's neck over an alcohol lamp to soften the plastic. Heat only the neck of the bottle, not the rest of the guard. When heated, the plastic will turn opaque white. While soft, slid the guard onto

continued on page 13

The Science of Ice

by Heath Shive, Three Rivers Gem & Mineral Society
via Rock Rustlers News, Feb. 2011

As many states still lie entrenched in winter's gloom, it might help to "know thine enemy." First

1. Ice and snow are technically minerals, just like quartz. They fit the official geological definition. And just like other minerals,

2. Ice and snow come in a variety of colors, depending on the impurities. Volcanic particulates of the Tambora Eruption of 1815 produced blue, brown and red snows in Maryland; and red and yellow snow in Taranto, Italy. In 2010, the Stavropol region of southern Russia experienced a light purple snow, attributed to Saharan dust. There has even been

3. Pink snow! Pink snow is regularly found in the Sierra Nevadas and is called "Watermelon Snow" due to its pink color. It even smells like watermelon (though you shouldn't eat it)! The color is the result of *Chlamydomonas nivalis*, a species of cold-loving green algae that has a secondary red carotenoid pigment (astaxanthin). But the true color of pure ice and snow is

4. Blue! Pure ice is blue, for the same reason the sky and oceans are blue. Water absorbs more light from the red spectrum and reflects more blue. However, snow looks white because trapped air reflect back all light. If an ice cube doesn't look blue, it's because large quantities are required to make the effect obvious and beautiful. But you don't want too much ice or otherwise we could have another

5. Ice Age! Starting about 2.5 million years ago (the Pleistocene Epoch) glaciers grew rapidly and spread across the world. At their

peak, glaciers covered as much as 30% of Earth's current land area. Summer temperatures were 10°C (18°F) colder than present. Sea levels dropped by more than 90 meters (250 feet), resulting in an extra eighteen percent increase in dry land, in turn creating land bridges across the Bering Strait, the English Channel, and Indonesia. The last Ice Age ended 15 thousand years ago, and the Pleistocene Epoch ended almost 12 thousand years ago. But to this day, no one is really sure...

6. Why the Ice Age began in the first place! Theories abound. The foremost theory involves the Milankovitch cycles, a term for how the Earth's "wobble" (precession), axial tilt (obliquity), and planetary orbit (eccentricity) all vary with a regular cycle of every 20 thousand, 40 thousand and 100 thousand years respectively. Those variations affect how the Earth is exposed to the Sun's heat and radiation, and could chill the planet. However Milankovitch cycles have operated since the Earth was turning. But the Ice Age was a geologically recent event, only in the last couple million years. For the majority of Earth's history, the planet has been considerably warmer. What else could have cooled the planet? Did the erosion of the newborn Himalayas absorb and remove vast quantities of carbon dioxide, an important greenhouse gas? Did the connection of the North and South American continents provide the catalyst? When the two continents joined, the Gulf Stream now carried much warmer and wetter waters farther north. This would increase precipitation (snow), and so increase glacier growth. Other scientists say that continental drift plays a factor, as Ice Ages don't really occur until there were large ice caps on the North and South Poles (which only occur when

large landmasses are near the Poles to serve as climatic "anchors"). No one is certain how the Ice Ages were born, or if they'll return again.

In a way, it's much like our winters today. They come. They go. But humans have tackled winters (and worse) and we still survive. We have fought every crisis that Mother Nature brings to us. And we have what it takes to continue...or move to Florida.

Sources:

"Southern Russia overwhelmed with purple snow." RT. 9 March, 2010. 23 January, 2011. <<http://rt.com/news/primetime/southern-russia-pink-snow/>>

Armstrong, W.P. 1987. "Watermelon Snow." Environment Southwest Number 517: 20-23.

Officer, Charles & Jake Page. Tales of the Earth: Paroxysms and Perturbations of the Blue Planet. New York City: Oxford University Press, 1993.

Fagan, Brian, ed. The Complete Ice Age: How Climate Change Shaped the World. New York City: Thames & Hudson, 2009.

Rafferty, John P, ed. The Cenozoic Era: Age of Mammals. New York City: Britannica Educational Publishing, 2011.

Polishing Jewelry

continued from page 12

your flex-shaft handpiece to form the plastic tightly around the handpiece, and allow it to cool. The guard can easily be slipped on when needed, or off when you do not wish to use it.

What Price is the Right Price?

by Karen Burns from *Back Benders Gazette*, February, 2010

The question came up again the other day—how do I figure my cost of goods sold, and how do I price my jewelry for sale?

Figuring Costs:

For the hobby jewelry maker who is not selling \$100,000 or more per year, figuring costs is simple. It is what you paid for materials. If you are doing wire wrap and fabrication, you can weigh or measure the materials, and using a conversion chart such as the one in the Rio Grande catalog or one of the online conversion charts, multiply it times the per gram cost of your purchases.

If you make and use cabochons or faceted stones, use the cost of the rough as the cost of the stone. Any waste that you use later has a cost of \$0. Keep track of what you purchased and what you have at the end of the year. The difference is your cost of goods sold for tax purposes.

Figuring Costs for Tax Purposes:

For tax purposes, there are also administrative costs and overhead such as postage and travel, stationery and envelopes, advertising and tools and equipment. Anything less than \$100–200 of purchases is just added into overhead. Big purchases are prorated by the number of years of expected use—usually 3–5 years. This should supply the information needed to file a schedule C for federal taxes.

Pricing Your Jewelry:

Pricing your jewelry requires a few more steps. Estimate the manufacturing costs by measuring or weighing the metals you use, and count the beads and findings and multiply them times your purchase price. These are your material costs for each item. Then include a factor for overhead and administrative

costs, utilities, etc. Multiply this by three, and add your hourly wage. This is your manufacturing cost. Double your manufacturing cost for a wholesale cost, and that is the lowest price that you should charge for your finished jewelry. If you employed someone to make your finished jewelry, there would be no profit for you at this point.

Profit and Artistic Merit:

Profit is a very subjective amount and is what I call the value of “artistic merit,” which is the result of your particular choice of materials, your creativity in designing the piece, and your skill in creating the piece of jewelry. The total should be in the neighborhood of three times the manufacturing cost estimate. Never underestimate the value of artistic merit. Then look at the piece and adjust the price to what you might be willing to pay. That is the full retail sales price of your jewelry.

Hints on Selling Your Jewelry:

Setting prices is an art, not a science, and it depends upon many subtleties, the primary one being the market in which you sell. Set your price, and don’t offer discounts—EVER. Forget three for the price of two, etc.—refer to the third sentence. That is simply re-pricing your merchandise. If you want to entice sales, offer something extra such as a pair of earrings or a simple finger ring, something with a low cost that doesn’t lower the value of the more expensive piece.

“But my things aren’t selling, and my prices are really low.” The answer may be, your prices are too low. There is a perception of value for the purchaser—if the price is too low, as in “if it’s too good to be true, it probably is,” so the perception may be that the

materials are cheap, the workmanship shoddy, and the design is poor. Raise your prices to be in keeping with the precious metals and hand-crafted work that you are selling.

Consider these two scenarios as examples of pricing and how it can affect sales. The prospective purchaser is holding your jewelry but can’t decide and finally says, “I really like it, but it’s a little out of my price range. Can you lower the price? After thinking it over a minute—really wait—you lower it by saying, “For the next five minutes and just for you, I will lower it \$XX, because I can see how much you like it.” You are making a special, unadvertised deal for this one customer. Or as an alternative, you can offer a pair of earrings or a ring saying, “What if I include this pair of earrings or this ring?” You are selling one-of-a-kind and/or limited edition pieces, and one reduction won’t affect your whole inventory.

This is not re-pricing your inventory. The next customer will not expect the same price or gift unless you choose to make the offer. Don’t do this routinely, or you are again re-pricing your inventory.

On the other hand, suppose your purchaser is holding your jewelry and says, “I can’t believe you’re only asking \$X, it’s so beautiful.” It is too late to increase the price when she has it in one hand and her credit card in the other. Price high. You can always lower it if it is really overpriced. How can you tell? If you have too many customers like the first and none of the second.

Sales is an art, and the most highly-paid employees in many businesses are the sales people on commission who have a good product to sell.

Red Quartz and Blue Quartz

by Steven Wade Yeatch, from *Pick and Pack*, September, 2009

Quartz (SiO_2) is a common mineral found in all three classes of rocks (igneous, metamorphic, and sedimentary) in many environments, and in a range of colors. Rose and blue quartz are less common than some of the other varieties. Rose quartz has a pale pink to rose red color thought to be caused by trace amounts of titanium that absorbs all colors except pink. This may account for its rosy color. In a laboratory experiment, samples of rose quartz from several localities were carefully dissolved in acid. The remaining insoluble residue consisted of thin microscopic fibers. These fibers may also be responsible for the color of rose quartz.

Well-formed rose quartz crystals are rarely found in nature. Rose quartz is generally found in massive chunks associated with pegmatites. The term pegmatite refers to exceptionally coarse-grained crystalline granite. Since rose quartz is cloudy, it is not popular as a faceted gem, but it is commonly formed into cabochons, rounded into beads for necklaces, or carved into various objects.

Rose quartz has been named as South Dakota's official state mineral. Here rockhounds have a good chance to find specimens ranging from shades of light pink to rose-red. Some rose quartzes from South Dakota have a distinctive asterism, a star shaped display of light on the polished surface.

Blue quartz, with a deep to sky blue color, is packed with tiny grains such as rutile (TiO_2) and ilmenite (FeTiO_3). Other inclusions might include tourmaline,

crocidolite, magnesioriebeckite, zoisite, and several others. Some researchers hypothesize that the blue color comes from the Rayleigh scattering of light by these microscopic inclusions. Rayleigh scattering selectively scatters visible light of the shorter blue wavelength. However, the cause of the blue color still remains uncertain. Blue quartz has a waxy luster and sometimes displays asterism.

Blue quartz occurs at a number of localities. In Llano County, Texas, blue quartz is found as small, doubly-terminated crystals in a rhyolitic porphyry informally called Llanoite. The crystals weather out of the host rock and can easily be collected. Blue quartz is also found in a diorite near the Dairyland Power Dam near Tony, Wisconsin. Blue quartz was recently discovered in the Cushing Point Formation at Peak's Island, Maine. The specimens there have inclusions with the chemistry of biotite. In the past, biotite has not been listed as a possible inclusion. Research now suggests that the inclusion of biotite on Peak's Island may be responsible for giving quartz its blue color. Blue quartz is associated with pegmatites of the Cape Ann Granite at Andrew's Point in Rockport, Massachusetts (Fig. 2). The author has found blue quartz at two Colorado locations: Park County near Hartsel and on the tailings of the Bull Domingo Mine in Custer County northeast of Silvercliff. A famous site—Antequera—near Malaga, Spain yields

translucent crystals of intensely blue quartz.

While some varieties of quartz are well known, such as amethyst and smoky quartz, blue quartz is a lesser known variety. The sapphire-blue quartz is wonderful to behold and exciting to find the field. The rich blue colors hold your attention and move you to plan a collecting trip. The variable rose colors beckon the collector to cut and polish slabs of rose quartz truly deserve a spot in your collection.

References:

- Coblieg, T., 1986. Why is Blue Quartz Blue?, *Geological Society of America* 18: 567.
- FrondeL, C., 1962. *The System of Mineralogy*, 7th edition, vol. 3, Silica Minerals, John Wiley and Sons Publishers, N.Y., 334 p.
- Koivula, J., 2003. Blue Quartz. *Gems & Gemology* 39, p. 44-45.
- Romero Silva, J.C., 1996. Blue Quartz from the Atequera-Olvera Ophite, Malaga, Spain. *The Mineralogical Record* 27, p. 99-103.
- Rossmann, G. R., 1994. Colored Varieties of the Silica Minerals: in *Silica: Physical Behavior, Geochemistry and Materials Applications*, edited by P.J. Heaney, C.T.
- Prewitt, and G. V. Gibbs, Washington, D.C., *Mineralogical Society of America, Reviews in Mineralogy*, vol. 29, p. 433-468.
- Wise, M. A., 1981. Blue Quartz in Virginia, *Virginia Minerals* 27, p. 9-13.
- Zolensky, M. E., Sylvester, P.J., and Paces, J. B., 1988. *American Mineralogist*, 73, p. 313-332.



This large rose quartz specimen was found at the Devil's Hole Mine about a mile from the town of Cotopaxi, CO
Photo © 2007 A. Schaak
(used w/permission)



This blue quartz megacrystal is located in the pegmatites of the Cape Ann Granite at Andrew's Point in Rockport, MA
Photo © 2007 H. Renyck
(used w/permission)

More Glimpses from Tucson

photos by Steve Weinberger



◀ Elbaite on Quartz. Tourmaline Queen Mine, Pala District, San Diego Co. CA

▼ The Ausrox Gold Nugget. 23.26 kg; 748 Troy oz. Found with a metal detector!



▲ Cuprite, Rubtsovskoe Cu-Zn-Pb deposit, Rudnyi Altai, Altaiskii Krai, Western-Siberian Region, Russia. This one is about 4" across!



▲ "The Big Kahuna". Kunzite, Oceanview Mine, Pala District, San Diego Co., CA


The Delaware Mineralogical Society

presents their

48th Annual Gem, Mineral & Fossil Show

Delaware Technical & Community College
Churchmans Road (Rt 58)
Newark (Stanton), DE @ Exit 4B, I-95

March 5-6, 2011
Saturday 10:00 a.m. - 6:00 p.m.
Sunday 11:00 a.m. - 5:00 p.m.




Ticket can be duplicated

An Educational Experience for the Entire Family

**Outstanding Mineral & Fossil Dealers
Gems, Jewelry & Lapidary Supplies
Demonstrations, Exhibits & Door Prizes
Jr. Booth for Kids**

Adults: \$6.00 (1.00 off with this coupon)
Seniors: \$5.00
Juniors (12-16): \$4.00
Children: FREE

Additional Information @ www.delminsociety.net




47th ANNUAL GEM-MINERAL-FOSSIL SHOW

MONTGOMERY COUNTY FAIRGROUNDS

MAR. 19 & MAR. 20, 2011
SAT. 10 AM-5 PM, SUN. 10 AM-5 PM

Presented by the Gem, Lapidary, & Mineral Society of Mont. Co., MD.





**16 CHESTNUT STREET
GAITHERSBURG,
MARYLAND**

Adult Admission \$6.00
With This Ad \$5.00
Under Age 12 Free

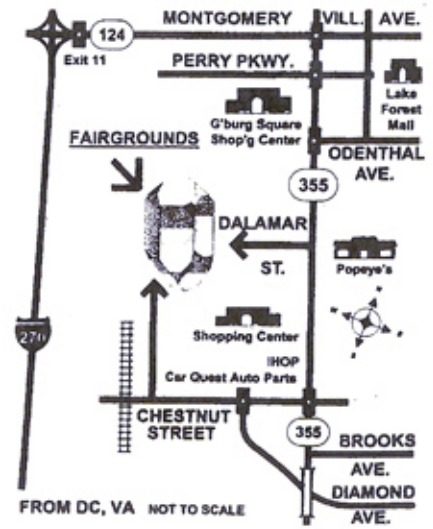
Featuring World-Wide Treasures *Over 40 Exhibits *Door Prizes *Demonstrations
*Free Workshop *Free Specimens for the Kids *Free Kid's Mini Mine *Food For Sale
*Fluorescent Minerals *Raffle *Information Center *Plenty of Free Parking

Over 20 Dealers From Around the Country:
*Fossils *Jewelry *Findings *Beads *Minerals *Geodes
*Gifts *Shells *Slabs *Fluorescents *Books *Equipment
*Carvings *Meteorites *Jewelry boxes *New age items
*Gems & Gem Rough *And Much More

Website—WWW.GLMSMC.COM

Income supports scholarships for college students in earth sciences, Science Fair awards, and gifts to the Smithsonian Institution's Gem and Mineral Hall



Gem Cutters Guild Dues Renewal - 2011

I wish to renew my Gem Cutters Guild membership for 2011.

Individual membership: \$18.00

Family membership (two adults and children under 18 living in the same home): \$30.00

Name of Member: _____ Birthday _____

Names of family members included in membership: _____ Birthday _____

_____ Birthday _____

_____ Birthday _____

Address: _____

City: _____ State: _____ Zipcode: _____

Telephone: _____ Cell: _____

E-mail: _____

Check here if you wish to go green and receive Gem Cutters News via e-mail ONLY _____

Please also enrol me in Open Shop for the year. (\$35.00 per person)

Name of members paying Shop Fee: _____

I hereby indemnify, release, and hold harmless, the Gem Cutters Guild of Baltimore, Inc. (the "Guild"), its instructors, officers, agents or representatives, from any and all responsibility for any injuries or damages I may sustain as a result of my use of, including but not limited to, Guild premises, such as the workshop, any equipment, tools, machinery, or supplies maintained, supplied or owned by the Guild; or owned by myself and used on Guild premises, business, events or activities. I agree that I will abide by all safety rules and regulations as set forth by the Guild, its instructors, officers, agents or representatives, whether given orally or in writing, so as to prevent any injuries or damages to my person or property. I also agree not to remove Guild equipment and to use due diligence to not damage Guild premises, equipment, tools, machinery, or supplies, or create an unsafe condition by my exercise of the use of these.

Signature (Required): _____

Signature of additional adult member _____
Required for Family Membership

Date signed: _____

Checks should be made payable to the *Gem Cutters Guild of Baltimore*





Mail to: Steve Weinberger
PO Box 302
Glyndon, MD 21071-0302



Carolyn Weinberger, Editor
 PO Box 302
 Glyndon, MD 21071-0302



Visit us on the web at
www.gemcuttersguild.com>

Sunday	Monday	Tuesday	Wednesday	Thursday	Friday	Saturday
MARCH 		1 Guild Meeting 7:30 pm Dave Mitchell on Caving!	2 Ongoing: Lapidary Class	3 Ongoing: Inter. Jewelry Projects Class	4	5 Possible Open Shop
6 Possible Open Shop 	7 Ongoing: Intro. to Jewelry Class	8	9  ASH WEDNESDAY	10 Ongoing: Inter. Jewelry Projects Class	11 Registration Deadline Soldering Projects Class	12 Possible Open Shop Quilt Expo 2011 Goucher College Sports & Rec. Center 20 am - 5 pm
13 Possible Open Shop Quilt Expo 2011 Goucher College Sports & Rec. Center 10 am - 5 pm	14	15	16	17 	18 Registration Deadline Zen & The Art of Soldering	19 Soldering Projects Class NO Open Shop Mont. Co. Show
20 Mont. Co. Show Possible Open Shop	21	22	23	24	25 Registration Deadline Fused Glass Class	26 Zen and the Art of Soldering Class NO Open Shop
27 Zen and the Art of Soldering Class NO Open Shop	28	29	30	31		

* For Those Paying 2011 Shop Fees