

Gem Cutters News



Award Winning Bulletin of the Gem Cutters Guild of Baltimore, Inc.
Baltimore, Maryland
<www.gemcuttersguild.com>
Volume 60, Number 5 May, 2011



Program Notes

by Mary Keller

Let's have some fun!

The May program will be on hand tools.

Let's have a meeting where everyone participates by bringing one or two favorite hand tools to the meeting and tells the rest of us what they are used for. Feel free to bring something you have made with the hand tool you bring. Think about unusual tools, homemade tools, vintage tools, tools for lapidary, silver copper, pewter or gold smithing tools, stone setting tools, wax carving tools, tools for beading, knotting, wire wrapping, or any other jewelry making related activity.

If you have a tool you do not know how to use, odds are some one attending will.



Our meeting will be held on May 3rd and will begin at 7:30 pm.

Board Meeting

Monday, May 9, 2011 - 7 pm
(Board members - please notify Mary if you cannot attend)

Chesapeake Gem & Mineral Show

from Bernie Emery

Our sister club, the Chesapeake Gem & Mineral Society has put on a one day show for the past 22 years. Originally held at Goucher College, the show is now at the Ruhl Armory on York Rd., just inside the Baltimore Beltway at exit 26 (York Rd., south).



Several of our members will be there selling cabbing rough, finished cabs, and jewelry, supplies. In addition, numerous vendors will have a large variety of minerals, more cutting rough and finished jewelry. We will have give-away items for kids under 12, an on-going silent-auction, activities for kids, and an awesome food vendor. We will also have door prizes and a raffle along with a chance to leisurely shop and chat with the dealers and your friends.

Hours are 10 am - 4 pm. There is plenty of parking and admission to the show is free.

Nibbles & Noshes

Our nibbles and noshes for the May meeting will be brought in by Zoe Whitman, Sheri Mutreja and Trin Phan. Thank you all for volunteering.



We still are in need of a refreshment chair. The responsibilities are simple – help set up the table at the meeting, then help clean up afterwards. By volunteering you'll be helping the Guild and having some fun at the same time. Please let Mary know you're interested.

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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.gem-cuttersguild.com>.

Officers:

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410-828-7222
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410-833-7926
- Past President - Richard Meszler
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Directors:

- | | |
|--------------|---------------|
| 2010 - 2011 | 2011 - 2012 |
| Jan Anderson | Wayne Homans |
| Richard Hoff | Anne Millar |
| Gene Miller | Dave Mitchell |

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Deadline is the 15th of each month

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Thoughts From My Rockpile

by Mary Keller, President



Thank you to everyone who attended the April meeting. I counted between 46 and 50 members and guests. Thank you to Steve Weinberger for talking to us about faceting. Steve had some great slides and some wonderful examples of his work. I admit I have not done either, but faceting certainly seems a lot safer than caving. You might have to make some decisions on equipment, rough, and what shape you wish to cut, but at least you do not have to squeeze yourself through narrow spaces to do it.

Please start thinking about your display case for the September show, volunteering to work, and potentially demonstrating your specialty. There will be more information coming on this soon.

It was good to see Gene Miller up and about at the April meeting. Gene, keep doing well and make a full recovery. See everyone May 3rd. Do not forget your favorite hand tools.

Mary

Birthday Wishes

from Linda Goldberg, Membership Chair

- 4 Barry Berlin
- 8 Melinda Hope
- 10 Sallie Miller
- 12 James Kandlebinder
- 14 William Cutman
- 17 Norma Wallis
- 20 Steve Page
Paulette Schauder
- 24 Jan Anderson

The birthstones for this month are emerald and chrysoberyl.



Welcome Back

from Linda Goldberg

It's a pleasure to welcome Chris Douglas back to the Guild. Please add his information to your roster to keep it up to date.

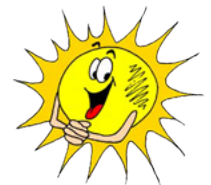
Chris Douglas
13 Cornbury Rd
Owings Mills, MD 21117
☎ 410-356-4765
<mhope@outdrs.net>

Sunshine

from Pat Baker

Good News!!!!

I've heard nothing so we all seem to be healthy.



April Meeting Minutes

by Sallie Miller, Secretary



The April 5th meeting of the Gem Cutters Guild was called to order by Mary Keller, president, at 7:34PM. The March minutes were voted on and approved as printed in the bulletin. Mary informed the membership that new officers had been appointed by the board due to recent vacancies. Sallie Miller has become Recording Secretary. Her husband, Gene Miller will take over her term as director and Jan Anderson will become a new director, replacing Pauline Furtaw.

Steve Weinberger gave the Treasurer's report and indicated that the club's accounts were in good order.

Committee Reports:

-Membership - Linda Goldberg introduced numerous visitors to our meeting.

-Sunshine - Pat Baker had no news to report.

-Class Planning - Richard Meszler reported that classes will begin tomorrow, April 6th.

-Field Trips - Wayne Homens announced that he is looking into setting up future field trips to North Carolina in May and to the Zion National Park Geology Fest held in Utah in the last week of July. He will give further information as it develops.

-Workshop - Dave Mitchell announced we have a new saw, however, the gaskets for the other saw have not yet arrived. There is a new video available on the maintenance of "The Genie". Also, the only open days available in April for Open Shop

are April 23rd and 24th due to the new class sessions.

-Show - Bernie reported that the show contracts have been sent out and approximately half of the dealers have responded. The dealers have until June 1st to reply. Bernie and Dave will have a meeting soon to discuss show committee chairpersons for the next show in September.

-Library - Our new librarian, Cathy Yestramski announced she is hard at work cataloging the Guild's books and a list will be available soon.

There was no unfinished or new business to be discussed.

Richard Hoff introduced our Show and Tell participants and they discussed the various gems, jewelry, minerals, etc. they brought with them.

Announcements:

The next Bead and Brunch will be held in June.

Carolyn explained that tickets are now available for this year's American Federation Endowment Fund Raffle. The money collected is used to provide funding for many worthwhile programs. The tickets are \$5 a piece or 5 for \$20.

Following the break, Steve Weinberger, began his talk entitled: "Faceting for Fun, if not for Profit."

The meeting was adjourned at 9:28 PM.

Submitted by
Sallie Miller
Recording Secretary

Show and Tell

from Richard Hoff



It was wonderful to see so many lovely things in our Show and Tell display last month.

Mary Keller brought in two woodcut stamps she purchased at a recent quilt show. The stamps can be used for polymer clay and PMC applications. She also showed an Indian bead necklace she purchased.

Several students from our recent classes brought their finished projects. **Gretchen Smutney** had a lovely glass pendant, **Jeri Haas** showed a pair of earrings, and **Jane Hardy** also had a pendant. Great work!

Pat Baker displayed a necklace made with anodized titanium and niobium beads as an enticement for her upcoming class. The beads held together with cold connections.

Pam Jeffries displayed her trove of creations from the recent "Bead and Brunch" gathering. Included were several lanyards as well as a black agate bead necklace.

Mayo Lucas displayed several cabs she cut in Lapidary class including Mookaite, snowflake obsidian, amazonite and a geode slice that she had wirewrapped.

And finally, **Cathy Yestramski** displayed a wax carving she's working on for a cast pendant.

This month why not bring in something you've made with the hand tool you're bringing for the meeting.

Internet Resources

by Lorraine Johnston

On some days, one's hands itch to work, but only fragments of ideas result. Other days, plenty of ideas blossom, but the physical self lacks energy. For either state, a break for inspiration can be fruitful. And inspiration is only one click away ...

First, to refresh that frame of reference for layperson's jewelry—and to appreciate how special your own creations are—see Ross-Simons (www.ross-simons.com), the huge New England mail-order jewelry firm with an impressive range of styles and pricing. RS offers something for everyone, including the independent artisan: the opportunity to admire, analyze, and then improve on any number of their beautiful pieces. For a lethal dose of mass-market inspiration, ask to be added to their paper-catalog mailing list.

The antidote is the selection of one-of-a-kind items at www.Etsy.com and www.ArtFire.com, such as the baroque wire-wrapped pieces by Hallie Tober (DesertLight1 on Etsy) and opal-dendrite doublets by Graham (StoneFeverJewelry on Etsy).

And in spite of its name, not quite one of a kind, but close: Uno Alla Volta (www.UnoAllaVolta.com) which features many fine pieces, including Michal Golan's extensive work and Barbara Garwood enamel pieces.

Are you weary of in-line beading? Try Marcia DeCoster (www.MarciaDecoster.com) or Lisa Kan (www.LisaKan.com) for right-angle weave, or Jamie Cloud Eakin (www.StudioJamie.com) for beaded bezels.

For exquisite silver filigree and filigree supplies, see Victoria Lansford's site (www.VictoriaLansford.com).



For work with niobium and titanium, see Holly Yashi's beautiful work (www.HollyYashi.com).

For lovely wire-wrap that honors the stone, and books and DVDs on the topic: Dale "Cougar" Armstrong (www.CougarsCreations.com). Alas, gentlemen, she's married.

For a lapidary website that can extend into a cyber-day-trip, visit the Prudent Man Mine (www.PrudentManAgate.com). Click on "polished pieces" and "contemporary jewelry", then contact owner Steve Howard in Idaho Falls, Idaho (208-520-2449) for a fascinating description of the mine and his efforts in veins one and two. Ask Steve how the mine was named! After hearing Steve describe his work, each stone one cuts will seem like a much-loved child.

And finally, there's Madagascar Minerals, offering a special item that soothes my mind about what I usually spend on eBay for slabs and rough: go to www.madagascarminerals.com and click on "gemstone tabletops".

To share websites or topics for future columns, Guild members can contact me using the information in the Guild roster.

Next month: faceting inspirations. A bientot!

Wonderful Wildacres

by Steve Weinberger

Although the wind really howled one night with gusts of 70 mph, the atmosphere and camaraderie at the just concluded Wildacres Workshop was warm and although night time temperatures were on the cool side, the days were sunny and clear.

Guild members Joy Woelfer, Richard Meszler, Bernie Emery, Carolyn and I enjoyed the week tremendously as did friends Lynne Luger and Mary Phelps. Speaker Gene



LaBerge treated us to interesting talks about areas that he's studied and collected in the upper Midwest and shared photos of some of his most prized minerals. Joy took cabochon cutting with Bernie while Carolyn took soapstone carving. I remained busy teaching faceting once again.

The fall session is just around the corner -- September 5 - 11 with Steve Chamberlain as the featured speaker. Classes being offered are Pat Baker's Cold Connections and Anodizing Metals; Faceting, Cab Cutting, Wire Wrapping, Chainmaille, Silversmithing, PMC, Gem ID, and Scrimshaw.

You can find more details plus a registration form by going to www.amfed.org/efmls/wildacres.htm. Cost for the entire week -- room and board -- is \$350 per person. There is an extra charge for materials for the class or classes you take of course, but you also get to take home some awesome finished work.

Join the fun! Put September Wildacres on your calendar today.

A Look Back – 61 Years of History

by Carolyn Weinberger



President Mary became curious about the Guild history the other day. She, like the majority of our current members have no idea about how we became a club, who our early “movers and shakers” were or how we’ve arrived where we are today. Having been involved in the Guild since 1970, Steve and I are the most logical members to convey some of the highlights of our history. Only Marge Lake and Gordon Hanna have been members longer than we have and unfortunately, Marge can no longer attend meetings due to her health problems and age and Gordon rarely attends due to the distance from his home. Thus the task of “remembering” falls on me.

Part I - Our beginning.

It all began on March 21, 1950 at the home of our founder, James W. Anderson. Mr. Anderson came to Baltimore from the west coast and brought with him a great love of and wide experience in lapidary work. He trained scores of Baltimoreans in this art at his home.

At the same time, Benjamin E. Schmidt was teaching lapidary and metalsmithing during the day and evening at City College High School. The two became acquainted and saw the potential for a club here in the Baltimore area. Thus the Gem Cutters Guild was formed after a meeting on March 21, 1950 at the home of Mr. Anderson.

Founding members

James & Frances Anderson *
Ruth G. Emmart
Edward A. Geisler *
August C. Gross
Leslie Mihm
Walter Nivett

Albert Packard
George Rapp
Benjamin E. Schmidt *
Charles W. Smith
Carl Studz
David E. Wallis *

**Became President of the Guild*

Incorporation of the new Guild did not occur until May 2, 1950 when sufficient funds had been collected through dues to defray the legal costs of doing so. The first “roster” consisted of 28 members and by the end of 1950 had grown to 40.

Charter Members (those joining after March 21, but before the end of 1950 were:

Robert Ballentine
Edward Benson, Jr.
Edward Brown
Charles & Catherine Callendar
Bertha Carter
Bessie Keen

Ruth Koch
Charles C. Leach
Henrietta Mace
Angela Muffoletto
Mildred Cartier
Frank Collins
Mr & Mrs. Leslie Crosman
Clinton & Etta Davison *
Mary Downey
William Engelbach
Elmer Gissel
Catherine Muffoletto
James Poetzsch
Sterling Riles
Elsie Kane White *
Robert Wilson
John & Margaret Wise *

Etta Davison, designed the Guild logo and Leslie Mihm, an attorney, served as legal council.

And thus we began! Next month....the early years.

136 Carat Yellow Diamond Found in Russia

by Becky Kays

ALROSA, the Russian diamond producer has confirmed that a 136 ct honey-colored diamond has been found in the Siberian province of Yakutia by Udachninsky Mining Company, a subdivision of ALROSA which mines approximately 25 percent of the world’s diamonds.



Early reports indicate that the stone exhibits both natural and mechanical cleavage. The super-rare irregularly shaped stone has not yet been appraised. The 33 x 23 mm gem will be handed over to the Russian State Precious Metals and Gemstones Repository. Whether the stone will be cut or not has yet to be determined.

Despite it’s harsh winter weather, Yakutia, a Russian republic in northeastern Russia, is one of the world’s leading diamond producers.

Mirny Diamond Mine in Yakutia, Siberia



EFMLS / AFMS Convention Almost Here!

by Cathy Patterson, Convention Chair and Bob Livingston

I must admit while I sip my orange juice in Florida, four miles from Walt Disney World, it is hard to get in the frame of our super show and convention 1200 miles to the North, so I sought some



help with this important article. By the time you read this, it will be less than 2 1/2 months to show and convention time. Seems like I have written a half dozen of these now, so if you are still on the fence re whether or not to come, I hope my Bakers Dozen reasons why, will definitely have you hop off saying YES!

1. This is a HUGE show --hosted by the largest club show between Cleveland and Boston with good mix of dealers. For some who always wonder, yes the building is air conditioned. That was not always the case. And yes for a couple of you who have asked, the 14-feet of snow Syracuse received this winter will be gone by then. Hate to disappoint some, but it has already melted.

2. We are truly unique -- we provide a large wholesale section for those of you with a valid state tax resale number (you will have to validate same to our "checkers"). For those of you who need summer supplies or whatever, the extra convenience of this could hopefully save you on travelling and shipping \$\$.

3. The phenomenal **Bob Jones** is honoring us with his first time presence here in Syracuse and will do his thing at the Saturday night Awards Banquet. If this time's the charm for Bob, we should be good enough for YOU! Be on the lookout for his "On the Rocks" column

soon in Rock & Gem magazine where he tells you lots of what to expect in Syracuse. Bob will bring a few copies of his brand new mineral book which you can purchase and he will gladly autograph.

4. The popular Editors' / Webmasters Breakfast is FREE if you stay in the Headquarters, Ramada Hotel. You don't come across a deal like that very often now do you?

5. Our "Learning Center" right at the show not far from our special Kid's area will offer you 8 time slots to sit in and pick up new hobby related knowledge from our interesting speakers. Next month I should be able to list the Topics covered.

6. We have at least (3) collecting trips planned for you on Monday and Tuesday following the show.

7. You will get to see the fine exhibits of others from all around. You too are encouraged to put in a case in either Competitive or Non-Competitive class of your handwork or your favorite specimens. We had 90 cases in 2004 and hope you all won't let us down this time.

8. We have those coveted, dazzling Herkimers which you can go collect while out here. Depending on your preference you can go after them the hard rock mining way or you can sift for them from other's rubble. Either way, you will find they are not far from the early Erie Canal route an hour plus east of your hotel in Syracuse.

9. You will get to be part of the our Syracuse club's Diamond Jubilee (60 years) and see first hand how a club celebrates same.

10. You get to get in on a really differ-

ent Crackerbarrel on Thursday evening which will include a narrated ride (sans Mule) on the actual original Erie Canal and across a recently replaced aqueduct. It is really neat to do. For those more exercise minded, you can take a stroll on the original towpath for a hundred feet or a mile-and-a-half. If you are from Ohio or west, the Erie canal played a huge role in Westward expansion. And if you just plain like big boats, the St. Lawrence Seaway and the famous Eisenhower Lock where you can see ocean going ships flying many of the world's flags is about 3 1/2 hours North.

11. I have to tell you, I love the west and the rocks and special beauty, but here you can ride thru the Finger Lakes and do some wine tasting or cheese tasting and enjoy our beautiful lakes and hills -- everything is really GREEN come July. And the extraordinary Corning Museum of Glass is only 2 hours south.

12. We only charge you \$6 for admission to our show plus when you bring back your stamped ticket on Sunday you get in FREE. And you get yet another bonus either day -- for only \$2 plus showing your ticket for our show, you can get in to the interesting Metaphysical Show a couple hundred yards away. While it is not for everybody, if you have never been to one it is a learning experience. And they are good for our dealers business as they buy and use a lot of crystals in their healing. Maybe an idea for your neck of the woods?

13. Lastly, if all this hasn't "Sold You," hopefully I saved the best for last. You get the camaraderie of being with and exchanging tales with the best darn people on the planet -- us Rockhounds!

As Woody the Woodpecker always says, "That's All Folks!"

A Safety Note on Kits for Emergency Preparedness

by Owen Martin, AFMS Safety Chair from AFMS Newsletter, May 2011

As we seem to be winding down from a rough winter at looks like our Spring storms are ready to continue bringing the punches. Although I've written a lot of the past couple of years about keeping you and your families safe while "in the field" I thought I'd take this opportunity to write about doing it at home.

In the past couple of months I've seen incidents of flooding, freezes, tornadoes, nor'easters and now fires.

So my question to the reading audience is, "do you have an Emergency Action Plan for your own family?"

For as long as I can remember our local fire departments and news stations have made recommendations that every family do at least one annual fire drill in their homes so that everyone knows what to do.

Similarly I'm asking each of you to consider building a list and a kit AHEAD of time for a few different circumstances.

First, a list for what you will need if you are stranded at home and lacking utilities. This list should allow you enough food and supplies to comfortably make it through at least three days and include a week's worth of water for each person in your house.

Second, a list for what you will need in the case of a short term evacuation. Assume time away from home for less than a week.

Third, a list for what you will need in a situation where you could be displaced from your home for a greater than one week term.

A couple of years ago we got hit

by hurricane Ike in Houston. My family and I were prepared and evacuated according to plan. Unfortunately several of my neighbors assumed it wasn't going to be a bad storm and stayed. A couple of things that they didn't count on were the total loss of utilities and the tornado that chewed up the roofs of all our houses.

I'm sad to say that the only people that were prepared for these other contingencies where my family and me and the older lady across the street. That left 14 families on our street with no clue what they were going to do and lacking a PLAN they flailed around inefficiently for days.

The results included a "second wave" of evacuations for the families, especially those with kids, who didn't realize they couldn't "live" without utilities. Also, several houses had significant ceiling collapses due to water damage that followed from rain after the tornado tore up a lot of the roofs. This left their houses unlivable in some cases for several weeks.

So enough about Hurricane Ike. My company has offices in Rayne, LA, where there was an F-0 tornado a few

weeks ago. Just a little tornado: it only left 1500 people homeless.

And did I mention the ice storm? A pipe froze and burst in my neighbor's house causing the collapse of part of the ceiling and them to be without water for three days. Unfortunately the plumbers were busy with lots of those problems...

Oh, and I can add...
lots more stories...
but should get back to the point!

I titled part of this article with the word "KITS" and thus I strongly encourage you to buy what you need well in advance of your time of need, and build your KITS. You'll find that most of your lists include many of the same things: cash, kids, pets, pillows, flash lights, cell phone chargers, batteries, tents, first aid kits, etc etc etc.

A cavalier attitude towards your own preparedness and safety is unfortunately common, however take the time to EXERCISE SOME COMMON SENSE and get prepared.

BE SAFE!!!

PMC Certification Class

photos by Steve Weinberger

The Guild hosted a PMC Certification Class at our workshop the weekend of April 8 - 10. Taught by Barbara Becker Simon, the shop came alive with energy as the students rolled, molded and fired their PMC.

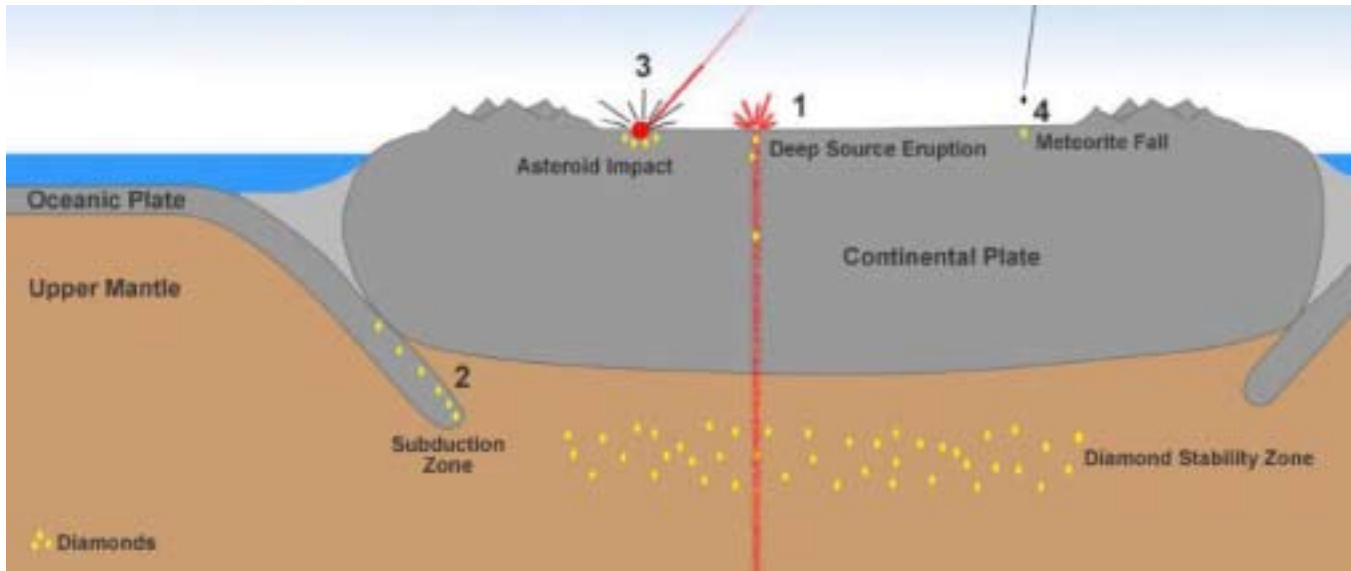
More photos on page 13.



How Do Diamonds Form?

Author unknown from Geology.com. Used with permission

Contrary to what many people believe, most diamonds do not form from coal.



Diamonds found at or near Earth's surface have formed through four different processes. The plate tectonics cartoon above presents these four methods of diamond formation. Additional information about each of them can be found in the paragraphs and small cartoons below.

Methods of Diamond Formation

Many people believe that diamonds are formed from the metamorphism of coal. That idea continues to be the "how diamonds form" story in many science classrooms.

Coal has rarely played a role in the formation of diamonds. In fact, most diamonds that have been dated are much older than Earth's first land plants - the source material of coal! That alone should be enough evidence to shut down the idea that Earth's diamond deposits were formed from coal.

Another problem with the idea is that coal seams are sedimentary rocks that usually occur as horizontal or nearly horizontal rock units. However, the source rocks of diamonds are vertical pipes filled with igneous rocks.

Four processes are thought to be responsible for virtually all of the natural diamonds that have been found at or near Earth's surface. One of these processes accounts for nearly 100% of all diamonds that have ever been mined. The remaining three are insignificant sources of commercial diamonds.

These processes rarely involve coal.

1) Diamond Formation in Earth's Mantle

Geologists believe that the diamonds in all of Earth's commercial diamond deposits were formed in the mantle and delivered to the surface by deep-source volcanic eruptions. These eruptions produce the kimberlite and lamproite pipes that are sought after by diamond prospectors. Diamonds weathered and eroded from these eruptive deposits are now contained in the sedimentary (placer) deposits of streams and coastlines.

The formation of natural diamonds requires very high temperatures and pressures. These conditions occur in limited zones of Earth's mantle about 90 miles (150 kilometers) below the surface where temperatures are at least 2000 degrees Fahrenheit (1050 degrees Celsius) (1). This critical temperature-pressure environment for diamond formation and stability is not present globally. Instead it is thought to be present primarily in the mantle beneath the stable interiors of continental plates (2).

Diamonds formed and stored in these "diamond stability zones" are delivered to Earth's surface during deep-source volcanic eruptions. These eruptions tear out pieces of the mantle and carry them rapidly to the surface (3), See Location 1 in the diagrams above and at right. This

continued on page 8

How Do Diamonds Form?

continued from page 7

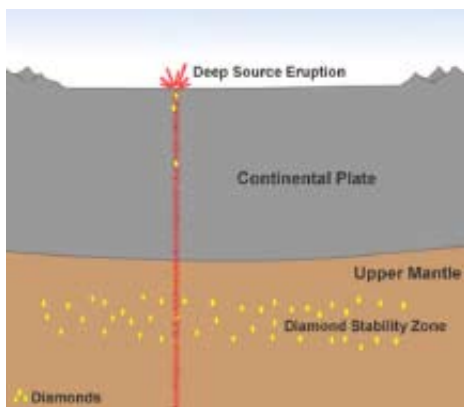
type of volcanic eruption is extremely rare and has not occurred since scientists have been able to recognize them.

Is coal involved? Coal is a sedimentary rock, formed from plant debris deposited at Earth's surface. It is rarely buried to depths greater than two miles (3.2 kilometers). It is very unlikely that coal has been moved from the crust down to a depth well below the base of a continental plate. The carbon source for these mantle diamonds is most likely carbon trapped in Earth's interior at the time of the planet's formation.

2) Diamond Formation in Subduction Zones

Tiny diamonds have been found in rocks that are thought to have been subducted deep into the mantle by plate tectonic processes - then returned to the surface (4). See Location 2 in the diagrams above and at right. Diamond formation in a subducting plate might occur as little as 50 miles (80 kilometers) below the surface and at temperatures as low as 390 degrees Fahrenheit (200 degrees Centigrade) (1).

Is coal involved? Coal is a possible carbon source for this diamond-forming process. However, oceanic plates are more likely candidates for subduction than continental plates because of their higher density. The most likely carbon sources from the subduction of an oceanic plate are carbonate rocks such as limestone, marble and dolomite and possibly particles of plant debris in offshore sediments.



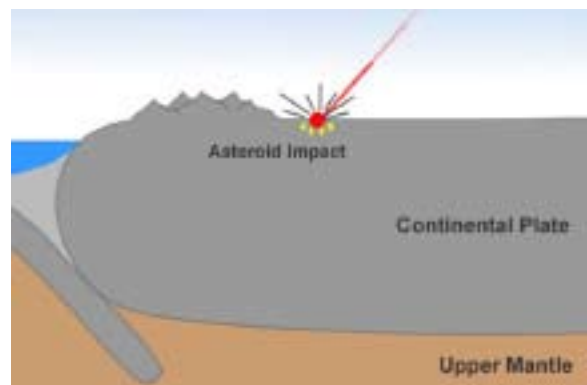
Subduction zones occur at convergent plate boundaries where one plate is forced down into the mantle. As this plate descends it is exposed to increasing temperature and pressure. Diamonds have been found in rocks that are thought to have been subducted and then returned to the surface. These types of rocks are very rare and no known commercial diamond deposits have been developed within them. The diamonds found in these types of deposits have been very small and not suitable for commercial use.

3) Diamond Formation at Impact Sites

Throughout its history, Earth has been repeatedly hit by large asteroids. When these asteroids strike the earth extreme temperatures and pressures are produced. For example: when a six mile (10 kilometer) wide asteroid strikes the earth, it can be traveling at up to 9 to 12 miles per second (15 to 20 kilometers per second). Upon impact this hypervelocity object would produce an energy burst equivalent to millions of nuclear weapons and temperatures hotter than the sun's surface (5).

The high temperature and pressure conditions of such an impact are more than adequate to form diamonds. This theory of diamond formation has been supported by the discovery of tiny diamonds around several asteroid impact sites. See Location 3 in the diagrams above and below.

Is coal involved? Coal could be present in the target area of these impacts and could serve as the carbon source of the diamonds. Limestones, marbles, dolomites and other carbon-bearing rocks are also potential carbon sources.



Diamonds have been found in and around the craters of asteroid impact sites. Earth has been repeatedly hit by asteroids throughout its history. These asteroids hit with such force that pressures and temperatures high enough to form diamonds are produced. If the target rock contains carbon the conditions needed to form diamonds might occur within the impact area. These types of diamonds are rare and do not play an important role in commercial diamond mining.

4) Formation in Space

NASA researchers have detected large numbers of nanodiamonds in some meteorites (nanodiamonds are diamonds that are a few nanometers - billionths of a meter in diameter). About three percent of the carbon in

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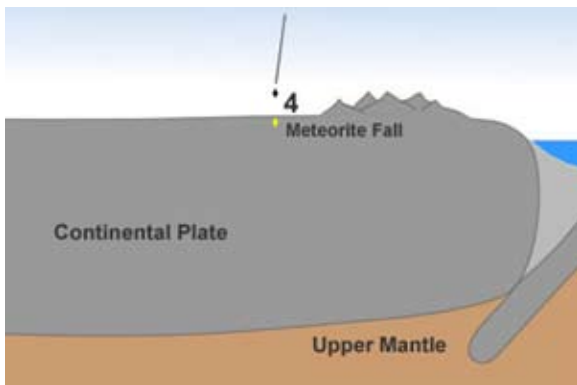
Diamonds

continued from page 8

these meteorites is contained in the form of nanodiamonds. These diamonds are too small for use as gems or industrial abrasives, however, they are a source of diamond material (6), See Location 4 in the diagrams above and below.

Smithsonian researchers also found large numbers of tiny diamonds when they were cutting a sample from the Allen Hills meteorite (7). These diamonds in meteorites are thought to have formed in space through high speed collisions similar to how diamonds form on Earth at impact sites.

Is coal involved? Coal is not involved in the creation of these diamonds. The carbon source is from a body other than Earth.



Diamonds have been discovered in some meteorites. These diamonds are thought to have formed in space in response to asteroid impacts or other severe events.

The Most Convincing Evidence

The most convincing evidence that coal did not play a role in the formation of most diamonds is a comparison between the age of Earth's diamonds and the age of the earliest land plants.

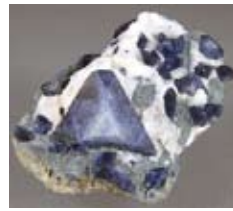
Almost every diamond that has been dated formed during the Precambrian Eon - the span of time between Earth's formation (about 4,600 million years ago) and the start of the Cambrian Period (about 542 million years ago). In contrast, the earliest land plants did not appear on Earth until about 450 million years ago - nearly 100 million years after the formation of virtually all of Earth's natural diamonds.

Since coal is formed from terrestrial plant debris and the oldest land plants are younger than almost every diamond that has ever been dated, it is easy to conclude that coal did not play a significant role in the formation of Earth's diamonds.

Minerals Named After Places in California

by Darryl Powell

from *Diamond Dan's MiniMiner Monthly*, @February, 2011
used with permission of the author.



Benitoite

1. Benitoite was named after San Benito County where it was first discovered.

2. Coyoteite was named after Coyote Peak volcanic pipe, which is 16 miles SW of Orick, Humboldt County.

3. Fresnoite was named after Fresno County where it was discovered at the Big Creek - Rush Creek sanbornite deposit, near the town of Trimmer.

4. Haiweeite was named after the Haiwee Reservoir in Inyo County.

5. Inyoite was named after Inyo County where it was found at the Mount Blanco mine, Mount Blanco, Black Mountains, Death Valley.



Haiweeite w/ Fluorite

6. Melonite was named after the Melones mine, Carson Hill, Calaveras County.

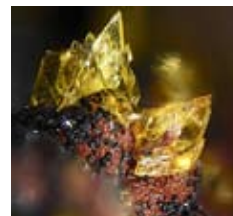
7. Redingtonite was named after the Redington mine, Knoxville, Napa County.

8. Redledgeite was named after the Red Ledge mine, south of Washington, Nevada County.

9. Riversideite was named after the town of Riverside where it was found in the Crestmore quarry, near Riverside in Riverside County.

10. Santaclaraitite was named after Santa Clara County where it was found in the Pennsylvania mine, on the southwest side of San Antonio Valley, near Mount Hamilton.

11. Searlesite was named after Searles Lake, San Bernardino County.



Stewartite with Laueite

12. Stewartite was named after the Stewart mine, Queen Mountain, Pala, San Diego County.

Lapidary Hints

from Ft. Collins' Lodestone, Feb '11

Many lapidarists now heat nodule and thunder egg halves under a heat lamp for a few minutes before polishing with tin oxide or cerium oxide on felt. The polish comes up almost instantly. Alternatives include putting specimens in a 200° F oven until they are warm to the touch or putting specimens in hot water until they are warm. Dry off excess water before polishing.

To break a cavity filled with fragile crystals away from a large matrix specimen: fill the cavity with fine dirt and hold the piece with the cavity facing up to retain the dirt while you trim the specimen. The dirt prevents the shock of the hammer blow from loosening the crystals.



Dinosaur bone is handled much like agate, sanded to 600 grit on silicon carbide, and polished on hard felt with tin oxide. The stone is finished with black rouge on muslin buff. The muslin buff can clean out the tin oxide that remains between the bone cells, and the black rouge applies a stain to the tin oxide that remains behind. What color rouge you use might depend on the color of your bone.

To spot cracks and vugs before sawing, first soak it in a tub of water for at least an hour. Remove the rock and place it in a sunny spot. The surface will dry quickly, but the fractures and vugs will not. Use a soft pencil to mark the rock for guidance in sawing.

Borax: The Mineral of a Thousand Uses

by Darryl Powell, from Diamond Dan's MiniMiner Monthly, February, 2011
used with permission of the author.

Borax is one of the most commonly used minerals in the home today. It is an excellent "booster" for laundry soap.



Borax
U.S. Borax Mine
Boron, Kern Co., CA

When added to a load of laundry, borax helps the laundry soap work better than it would by itself. It is used as a deodorizer (it absorbs odors), to soften water, and even to repel pesky insects like cockroaches! Mix a spoon full of borax with a little

powdered sugar and leave it out on a plate. Cockroaches and ants will eat the sweet mixture. The borax causes the insects to have gas and then they die. It is claimed that a clogged drain can be cleared by pouring borax mixed in boiling water down the drain.



Borax
U.S. Borax Mine
Boron, Kern Co., CA

Take lint from your clothes dryer lint catcher and add it to the polishing compound for tumbling. It will speed up the polishing and prevent chipping.

Did you know that malachite is very poisonous in its raw state? Never lick the material to see the color. Don't even repeatedly lick your finger and apply.

When you grind, wipe the contaminated oil off your skin right away. If you smoke and the taste becomes very sweet you are absorbing the malachite dust. The copper oxide dust is mixing with the moisture in your mouth and reacting to the tar in the tobacco, turning it into saccharine. Needless to say, you should take some immediate steps to stop the inhalation.

When cutting malachite, use plenty of water, wear a mask and work in a well ventilated area.

Gad Bars

from Rose Alene McArthur



A gad is a tool about six or seven inches long that is circular in cross section. One end is a sharp, tempered point. When you are trying to break off a piece of rock from a large boulder or ledge you can pound in a series of gads in along a zone that looks weak or cracked. In order to break the part off that you want you just pound the points gently in at first. Then you gradually drive each one deeper to put the same amount of pressure all along the crack to try to get the whole piece you want to come off at once. Your pry bar may come into play at this point. But if you had just stuck the pry bar into the crack there would be much more chance

Chrome, Rubies, Emeralds and Alexandrite

from *Popular Mineralogy* by Andrew A. Sicree. Used with permission of the author

One element, two colors

Ruby. Emerald. One is red, the other green. But both derive their vibrant colors from the same element: chromium.

Ruby is the red variety of the mineral corundum (hexagonal aluminum oxide, Al_2O_3). Blue sapphire is another variety of corundum. Yellow gems occur as well, but in its purest state corundum is colorless or white.

The rich luminous red color of ruby is due to an impurity within the aluminum oxide crystal structure. Traces of chromium (as chromic ion, Cr_3^+), replace aluminum (Al_3^+). In ruby, about one atom of aluminum per hundred is replaced by a chromium.

What is the effect of this small amount of Cr_3^+ ?

When white light (which, you will recall, is composed of red, orange, yellow, green, blue, and violet light) passes through a ruby, violet light is strongly absorbed along with green-yellow light. Blue light and red light are transmitted. Transmission of red, however, is much stronger than that of blue, so the ruby looks red. Ruby's particularly rich red color comes from this strong red transmission, enhanced by a little bit of blue.

Fluorescence of ruby

Rubies look even better outdoors. There is a fraction of ultraviolet light in natural sunlight and the luminous glow of a cut ruby outdoors results from a red fluorescence which is, coincidentally, almost identical to its red color. In the dark, under an ultraviolet lamp, rubies will fluoresce a beautiful red. In 1960, this fluorescence was utilized by Theodore H. Maiman the Hughes

Research Laboratory in California to make the world's first laser. Maiman's laser was constructed using a rod of ruby with silver-coated ends; it was "pumped" (powered) with a high intensity xenon flash lamp. Xenon flash lamps produce a bright pulse of both ultraviolet and visible light. The first laser used red fluorescence of ruby to produce its red beam of light.

Rubies are red, emeralds are green

"Okay," you say, "but if chromium gives us the red color in ruby, how can it give us a green color in emerald?"

Emerald's color is so distinctive that only the term "emerald green" describes it well. Emerald is a variety of the mineral beryl, $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$. Like pure corundum, pure beryl is also colorless. (Natural colorless beryl is sometimes called goshenite, after the town of Goshen, Massachusetts, one locality for the variety.)

As in ruby, the green color in emerald is due to chromium impurities.

The chromic ion, Cr_3^+ , replaces aluminum (Al_3^+) in the mineral's structure in a manner very similar to that in ruby. But slight differences in the bond strengths between ruby and emerald lead to slight shifts in the absorption and transmission bands. Violet light is still absorbed but the greenyellow absorption band of ruby shifts to absorption of yellow-red light in emerald. This diminishes the transmission of red light so that the transmission of bluegreen light (corresponding to the weak transmission blue light in ruby) is now strongest and becomes most important in determining the color of the emerald.

Like ruby, emerald fluoresces red under ultraviolet light. If iron is present in either, the fluorescence is quenched (i.e., doesn't fluoresce).

The alexandrite effect

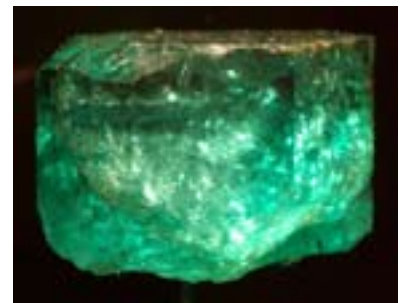
Drastic differences in color occur from the introduction of chromium

continued on page 12

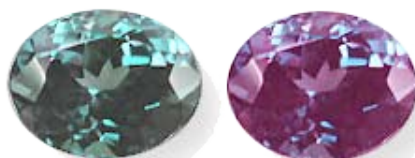
Ruby, Emerald and Alexandrite at the Smithsonian



Carmen Lúcia Ruby
Chip Clark photo



Gachala Emerald
S. Weinberger photo



Alexandrite shown under sunlight (left) and tungsten lighting

PMC Certification Class

photos by Steve Weinberger

impurities into beryl or corundum. What happens when chromium is present as an impurity in other minerals? Chrysoberyl is BeAl_2O_4 and is colorless when pure. Add a trace of chromium and chrysoberyl becomes the alexandrite variety. When chromium is present as an impurity, the resulting bond strengths are intermediate between those in ruby and emerald. The result is a mineral in which the bluegreen transmission band closely matches the red transmission band in intensity.

So what color is chromium-rich chrysoberyl?

Is it the red of ruby or the green of emerald? It turns out that the color of alexandrite depends upon the light shining upon it. Sunlight and fluorescent tube light are both rich in blue-green light. On the other hand, incandescent light (such as that coming from normal light bulbs with tungsten filaments) and candlelight are rich in red light. Shine an incandescent light on alexandrite and the stone appears deep red in color akin to ruby. Put the stone under a fluorescent bulb or carry it outdoors and it shows a blue-green color somewhat similar to emerald. This color change is known as the alexandrite effect and it shows up in a few other minerals such as monazite from near Badin, Montgomery County, North Carolina, which is light green under fluorescent light, yellow-orange in daylight, and reddish-orange under incandescent light (cf. "Monazite from North Carolina having the alexandrite effect" by Lawrence R. Bernstein in *The American Mineralogist*, 1982, v. 67, p. 356-359).

Note: The term alexandrite effect originally referred stones that showed a shift from greenish color to reddish

color when moved from sunlight to incandescent light (cf. "The Alexandrite Effect: An Optical Study" by William B. White, Rustom Roy, J. MacKay Crichton in *The American Mineralogist*, 1967, v. 52, p. 867-871). But it has come to be used for all types of color changes resulting from different light sources. For instance, the term is used for pyrope garnets from the Gates-Adah kimberlite dike in Fayette County, Pennsylvania, that are pinkish-purple or raspberry-colored under incandescent light and bluish to greenish-gray under fluorescent light (cf. "Blue Gray by Day and Pinkish Purple by Night:

Pennsylvania's Pyrope Garnets" Robert C. Smith and John H. Barnes, *Pennsylvania Geology*, 2006, v. 36, no. 4, p. 4-12).



Barbara Becker Simon



New Kiln for the shop



Pat and Emily listen attentively

Upcoming Classes

from Richard Meszler

Polymer Clay – May 6th
Registration deadline April 29
\$70 (\$60 for members)

Faceting - Beginning May 14
Registration deadline May 6
\$260 (\$250 for members)

Small Torch Soldering - May 15
Registration deadline May 10
\$60 (\$50 for members)

It's not too late to send your registration form and check to Jackie to be included in any of these classes.

Grinding Wheel Safety Thoughts

©by Charles Lewton Brain. Used with permission

Besides the safety instructions that you get from a tool manufacturer in the tool manual it may be necessary for you to write your own sets of rules up to keep you out of trouble. This is especially important with employees. What follows is an example of thinking about what can go wrong with a tool. The tool used as an example is a mounted grinder. You can do the same sort of rule compilation with all the tools in your shop. See the "General Safety Rules for Tools" article as a starting point, then each tool will have certain idiosyncrasies which need to be noted. Think of it as "What advice would I give to someone to keep them out of trouble on this machine?"

Note: These are only some points regarding this issue; this description is likely riddled with errors and omissions and is a guideline only to certain types of hazards. Other hazards not mentioned here exist. Read your owners manual carefully for the tool and equipment you are using.

Instructions: Read each sentence to yourself and preferably out loud to another person. Carefully discuss and come to agreement with the other person on the meaning of the sentence. Add any precautions or important information we have missed to this text: just write it in on the page along with the information we are reporting here.

Some of the hazards of grinding

Flying razor-sharp chunks into your eyeballs and skin, fire (from sparks, electrical short circuits, flammable materials leaping into flame), detonating grinding wheels, objects kicking back (and through you),

burns, gouges in your hands, sucked into the machine by your jewelry or clothing, electrocution, dusts and particulate, ergonomic damage and loss of hearing (and here are probably lots more hazards I forgot).

General precautions

- * Keep a regular maintenance/inspection cycle and keep a log in your shop tool binder.

- * Read the manual carefully-spend a minimum of 1/2 hour on it. And review it once in a while. Follow its instructions carefully when changing parts or accessories.

- * Wear adequate eye and hearing protection. Wear hair up and avoid loose clothing or jewelry.

- * Do not talk to anyone while using this machine.

- * Do not have any distractions while grinding.

- * Keep this tool in its own small area, free of clutter, preferably with at least low walls around the area to isolate the tool and debris from it.

- * Have good housekeeping and clean the area around the tool after every use.

- * Make sure local ventilation is appropriate for the tool

- * Have good lighting on the working area of the wheel, a mounted desk lamp or one on each side is good (illumination from two sides eliminates shadows)

- * Always have the machine properly mounted and screwed securely in place onto a sturdy work surface.

- * Turn off the machine when not in use.

- * No children in the workshop.

Flying particles, sparks

These can embed in your eyes and skin, at the time of grinding or later. Flying particles can also be sparks which can set you, your clothing, your shop on fire:

- * Wear eye protection

- * Always keep the eye shield on the grinder in place and properly adjusted.

- * Wear a face shield as well as safety glasses, keep the face shield close to the chest.

- * Fire proof clothing/apron.

- * Local fire proof exhaust for particles.

- * Grinding area easy to clean and isolated from other work areas.

- * Keep all flammable materials, paper, cloth, solvents, potential fuels away from the grinding area.

- * Do not grind wood or other flammable materials on the same wheel used for metals.

- * Clean up particles using hand broom/vacuum (never with your hands) after every use of the machine-make a habit of it.

Wheel disintegration

A cracked grinding wheel can fly apart suddenly and chunks can, literally rocket right through your body. A student of mine saw a piece of grinding wheel go right through someone's thigh and out the other side in a machine shop they were working in.

- * Always treat grinding wheels gently, never hit them with anything.

- * Always use a wheel guard.

- * If you have dropped a wheel do not use it or mount it on the machine. Throw it away.

continued on page 14

- * Do not use a wheel that may be damaged.

- * When starting up a grinder always stand safely to one side until the wheel has reached speed and run for some seconds at speed. If a grinding wheel is going to fly apart it often does so during the wind up phase.

- * Wear your protective gear.

- * Use the right grinding wheel for the job, properly rated for the

Motor speed and the correct size

- * Ring test a grinding wheel before mounting it or changing it.

- * Inspect the grinding wheels carefully on a regular basis.

- * Grind evenly across the face, avoid creating ruts in the wheel.

- * Do not use the side of a grinding wheel, just the face. Side pressure can cause a wheel to crack.

- * Do not grind too hard, do not try and take off too much material too fast, use the right tool for the right job.

- * I recommend only grinding steel on the wheel. Use a belt sander for non-ferrous metals.

- * A wheel "loaded" with metal residues cannot grind properly.

- * Do not grind when you have turned the motor off and the wheel is spinning down to a stop.

- * Dress the wheel with a wheel dressing tool if required to keep a wheel flat. Wheels with chips, flat spots, gouges and glazed areas should be dressed. Bad spots like that can make grinding more hazardous and inefficient, reduce accuracy, and damage the work surface by burning or gouging it. Dressing your wheel helps keep it balanced, which is important for safety.

Metal trapped in between tool rest and wheel

If a piece being ground is trapped in the guard it can cause a wheel to shatter explosively, be flung out suddenly piercing you or others like a spear or flip up trapping your fingers against the wheel thus causing severe damage.

- * Always keep the tool rest the correct distance from the wheel, usually 1/16th of an inch (1.5 mm). As the wheel is ground down the tool rest needs to be reset.

- * Be especially careful when grinding edges, corners, ragged joins and so on.

- * Check the tool rest for tightness and position EVERY TIME you use the grinder-make a habit of it.

- * Always brace your holding hand on the tool rest so the object being ground is securely held and cannot get caught in the gap at the tool rest or bounce back at you.

- * Do not use pliers (or anything in which the work being ground can slip) to hold an object being ground.

- * Never put the object being ground close to the gap between the wheel and the tool rest.

Clothing trapped in wheel clothing, hair, jewelry can be caught on the wheel and cause severe injury.

- * Do not wear gloves while grinding (or using a polishing machine)

- * Tie hair back, better is to wear a visorless cap as well

- * do not wear loose clothing, tie, jewelry

- * Roll your sleeves up

- * Never bring your head close to the moving wheel

Kickback

If a workpiece being ground is caught on the wheel it can suddenly jerk towards you in the hand

- * Do not hold a piece of metal so that it can puncture your palm if it kicks back and out.

- * Hold the workpiece very securely bracing the hands on the tool rest

- * Be aware of the potential for kickback.

- * Touch the workpiece repeatedly to the wheel, take off metal a bit at a time.

- * Draw the workpiece smoothly across the front of the wheel.

- * Never put the object being ground close to the gap between the wheel and the tool rest.

- * Do not push the workpiece hard into the wheel

Hot materials/burns

- * Have a water dip next to the wheel, small water pans designed for this can be attached to the front and middle of the grinder.

- * Dip frequently to cool the workpiece.

- * Have ice available in the workshop for cooling a burn.

- * It is best to dip to cool leather finger cots may be useful-Do Not Use gloves.

- * Always cool a workpiece before putting it down and picking up the next one.

Grinding fingers

- * Do not push your fingers onto the wheel. Really. Really really.

Grinding Wheel Safety

continued from page 14

* Do not hold in such a way that you can slip and grind your finger or knuckle.

* Do not talk to anyone or have any distractions while grinding

* Move slowly and calmly while using the machine.

* Many ground fingers result from rapid hand movements near the spinning wheel-move slowly and deliberately

* Keep your fingers safely away from the surface and corners of the wheel, a divot in the finger or knuckle happens ridiculously easily on a grinding wheel (voice of experience)

Electrical fire and shock

* Regularly inspect visible wires and plugs for condition.

* Check to see it is properly grounded.

* Use a proper grinding machine with a sealed bearing construction. Dust getting inside a grinding motor can start a fire.

* Be careful of water spillage: you can get electrocuted or start a fire.

* Make sure the wall socket and house wiring is rated and fused correctly for the load of the grinder (and other tools on in the shop at the same time).

* Use a fused power bar for the grinder. Attach the power bar securely to the wall.

* Always unplug the grinder before changing any parts.

Maintenance

* Follow all directions in the instruction manual. If you don't have one call the manufacturer for a copy to work from.

* Clean up dust and particles every time you use it.

The Trivia Yug

by RJ Harris from Rock Buster News, April 2011

▶ A 1-carat diamond weights 200 milligrams, or 3.086 grains troy. The measurement originally represented the weight of a seed from the carob tree.

▶ In September 1954, Mrs. Hewlett Hodges of Sylvauga, Alabama was hit by a 10-pound meteorite while she napped.

▶ Chickens eat rocks to help their digestive systems. They are also a source of calcium for egg production.

▶ T-Rex had the largest teeth of the dinosaurs, the size of bananas.

▶ Sulfur and minerals from the Dead Sea are used for treating acne and skin ailments.

Sources:

PSU Ag Extension, Book of Answers, scholastic.com.



You know, of course, that our marriage is on the rocks!
via Rocky Reader, February 2002

* Inspect wheels and wiring regularly.

* Keep a log and make notes in it.

* You maintain your car, why not your other mechanical tools?

Mark Your Calendar!

**OUR Show is
September 24 – 25**

Bench Tips

by Brad Simon

Loose Heads



Flying off the handle is never good, particularly if it's a hammer head. The traditional way to tighten a loose hammer head is a bit of work, but there's a fast and easy solution available for about 50 cents - super-glue. Simply put a couple drops in from the handle side, let it set up, and then a few drops from the top side. Be sure to get the thin super-glue, not gel. It's available from the 99 cent store, 2 in a pack.

Silicone Polishing Wheels

In the finishing sequence there is a step called pre-polishing between sanding and buffing. One of the most effective tools I've found for pre-polish is the little silicone wheels used in a ForeDom® or Dremel®. They come in several different abrasive levels and several different shapes. The wheels are color coded to denote their abrasive level. Different shapes (coin, knife, cylinder, point, etc) are available to match the geometry of the area being cleaned up.

For a starter, I'd suggest a medium, a fine and an extra fine wheel in both the coin shape and the knife-edge shape. The thicker coin shapes are particularly handy. Be sure to get a few mandrels to have one of each mounted and ready to go. Cylinder shapes are nice for doing the inside of rings.

Most jewelry catalogs carry these wheels, but often the color codes don't match between different manufacturers.

The Geologists Lament

by R.L. Frism, 1940 via El Gambrisino, April 2011

Gather 'round me, hear my story,
I'm a rockhound in distress
I'm a rockhound bathed in troubles
I'm an outcast, more or less.

I have fossils in the kitchen,
I have crystals in the hail.
I have minerals in the bathtub;
I have relics on the wall.

I have oxides on the carpet
I have oil upon the floor.
I have blacklight in the parlor
I have bones behind each door.

Attic rooms are fairly sagging.
Rocks pave the cellar floor,
Pockets bulge with gemmy pieces,
All of this and millions more.

Wifey thinks that I am goofy
I don't know, she may be right.
She insists I have silicosis,
Or some contagious form of "ite".

Says my head is lined with agate
(A freak displacement of the bone),
Says my brain is just a nodule.
Says my heart is turned to stone.

Threatens me with separation;
Storms about our rockhound home,
Says life for me is just a geode
Or a hunk of mammal bone.

Are you rated as a fossil?
Are you obliged to live alone?
How do you maintain a hobby,
And still maintain a happy home?

22nd Annual Chesapeake Gem & Mineral Show

Saturday, May 21, 2011
10 AM – 4 PM

Ruhl Armory - Towson, MD

FREE ADMISSION

Top Mineral Dealers, Original Jewelry
Silent Auctions, Door Prizes




Directions: Take I-695 (Baltimore Beltway)
to exit 26 - York Road South
Ruhl Armory is on the east side of York Road
(across from a car dealer and funeral home)
just inside I-695.



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
1 Possible Open Shop *	2	3 Guild Meeting 7:30 pm Refreshments: Z. Whitman, S. Mutreja, T. Phan	4 Lapidary Class	5 Reactive Metals Class	6 Registration Deadline Faceting Class	7 Polymer Clay Class NO Open Shop
8 Possible Open Shop * Mothers Day	9 Board of Directors Meeting at the Workshop 7:00 pm	10 Wax Carving Class Registration Deadline Using a Small Torch Class	11 Lapidary Class	12 Reactive Metals Class	13	14 Faceting Class Possible Open Shop * begins at 2:30 pm
15 Using A Small Torch- Class NO Open Shop	16	17 Wax Carving Class	18 Lapidary Class	19	20  Armed Forces Day	21 Faceting Class Chesapeake Gem & Mineral Show - Ruhl Armory 10 am - 4 pm Possible Open Shop * begins at 2:30 pm
22 Possible Open Shop *	23	24 Wax Carving Class	25	26	27	28 Faceting Class Possible Open Shop * begins at 2:30 pm
29 Possible Open Shop *	30 MEMORIAL DAY 	31				

* For Those Paying 2011 Shop Fees