

# THE ROCKHOUNDER



# SEPTEMBER 2012

**PURPOSE:** The purpose of the Gem, Lapidary, and Mineral Society of Montgomery County MD., Inc. is “To increase knowledge and popular interest in earth sciences, geology, mineralogy, paleontology, lapidary arts, and related subjects”.

**REGULAR MEETING:** Meetings are held the 2nd Monday of the month from September to June. The Society will meet on **Monday September 10th** in the dining room of the Rockville Senior Center, 1150 Carnation Drive, Rockville. A short business meeting will begin at 7:45 pm but the room is available to us at 7:30 pm so come early and chat with old friends. The speaker will be member, **Robert Simonoff**. The topic will be "**The 2012 Ste. Marie Aux Mines Mineral Show: The Show That almost Wasn't**" Last year, one of the most popular mineral shows in Europe, the Ste. Marie Aux Mines show in France, was embroiled in a controversy. There were concerns whether or not the show would continue forward – or if it did continue, would it still be great. The Simonoffs had already decided to go to France for a family celebration, visit Paris, attend the show, and spend a day touring the Alsace region of France, where Ste. Marie Aux Mines lies. Bob will tell the story of the controversy and how it turned out. He will also share hundreds of mineral photos as well as some Alsace scenery shots. Don't miss it!



Photo by W. Mohr

**THE BOARD OF DIRECTORS** will meet Monday, September 24, at the Home of Andy Muir. **NOTE THIS IS ONE WEEK LATER THAN NORMAL.** All Board members are expected to be there. Any member is welcome to attend but kindly let Andy know if you plan to attend at: <amuir21@comcast.net> or phone 301 990 1370.

**DUES** Unless you have paid, **your GLMSMC membership expired August 31, 2010.** Membership dues are due by Sept. 1st. Single membership is \$15 per year, Family membership (Which is defined as up to 2 adults and children under 18 years of age) is \$20 per year. **There is a \$5.00 surcharge for late renewals.**

We pay EFMLS/AFMS dues and over \$3.00 for insurance for each member over 10 years of age so when renewing, list only those interested in taking part in Society activities. Send dues (check to GLMSMC) to Membership Chairman Doug Baum, 11205 Golden Meadow Court, Germantown MD 20876-1740, (301 515 4641 or e-mail dbaum@gazette.net for questions.) He will mail your membership card(s) back to you if you send him a self addressed stamped envelope, otherwise you may pickup your card(s) at the September regular meeting. If your phone number, address, e-mail address, or other vital information has changed since the January 2012 Roster or subsequent *Rockhoun* updates please let Doug know.

**HELP BY PAYING YOUR DUES ON TIME. DO IT NOW**

**DEADLINE for The October  
2012 Rockhounder: September 24th**

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**PRESIDENT'S MESSAGE**

By Andy Celmer

The Prez Sez

“Hello, We’re! Glad! you made it! Welcome! To! The Future!”  
Those of you who recall, at our last meeting, I sang, “Will I see you in September, or lose you to a summer love.” Beach Boys, of course.

Well, If you’re reading this, you are still part of the **Gem, Lapidary, and Mineral Society of Montgomery County**. Or you just read anything that is placed in front of you. I don’t know!

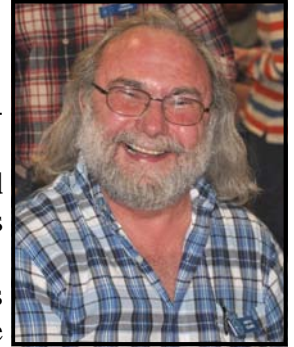
Allow me to entertain you with one of my summer adventures. Two couples decided to go paddling on the Eastern Shore, the other couple wants to do the lower Pocomoke River. He figures we can do the 6 miles of river in 3 hours.

We put in about noon; the water is tidal and flowing at a good pace. For the first 3 hours everything is great, then we start to encounter downed trees across the river. The portage around the downed trees continues, at 7 pm we abandon the boats and attempt to walk out. On both sides of the river is swamp that we cannot cross, so we take off downstream. At 8:30 pm it’s getting dark and we call 911. The helicopter is having trouble finding our location due to the trees. I had anticipated we could be here for a while, like all night, and I have started a fire. The helicopter spots the fire, showing the sheriff our location and he leads us to safety.

The moral of this story is never forget what happened to Gilligan on “A 3 hour tour, A 3 hour tour.” But I digress!

Anyway, it’s time to get your butt out of your chair, assemble your finds of the last few months, and WOW! The crowd.

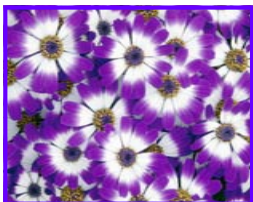
I have been collecting fossils from West Virginia all summer. You could say I have fossils coming out my WaZoo. As I do not know where the WaZoo is located on the Human Body, I am having difficulty determining where said fossils are originating. But have no fear; all will be revealed at our next meeting!  
Andy B, the B stands for Bested by Mother Nature!

**ASSISTANCE STILL REQUIRED**

The Board urgently continues the request for a couple of good members to step forward to fill two very important positions in

our organization. An Editor still is required to replace Wendell Mohr, who needs to step down. The Editor becomes a Board member as well as managing the publication of *The Rockhounder*. Questions may be addressed to Wendell Mohr at <wmohr@erols.com> or 301 926 7190. Also, Bob Irby has requested to retire from his long time job as Demonstrations Chair for the annual show. Questions may be addressed to Bob Irby at <irbyre@verizon.net> or 301 540 5033. After your questions are addressed contact Andy Celmer <Abcpec@comcast.net> or 301 865 4442 to step up!

**CONDOLENCES** to Wendell and Jo Ann Mohr upon the unexpected death of their oldest daughter, Deborah Bruce, age 57. She died on July 11th in Louisville KY, as a result of a stroke. She is survived by her husband, Dr. Reginald

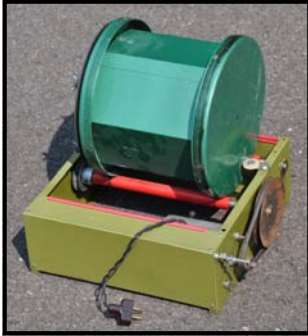


Bruce, brothers Vincent Mohr of Rochester NY, Bradley Mohr of Seattle WA, and sisters Cynthia Mohr and Pamela Cosimano both of Gaithersburg MD. Deborah was research manager of Research Services at the Presbyterian Church (USA) where she worked for 19 years. She co-authored four books based on the U.S. Congregational Life Surveys which were conducted in 2001 & 2008.



**REGULAR & BOARD MEETING MINUTES:** Since there were no meetings held during July or August, there are no minutes this month.

**SEPTEMBER SILENT AUCTION:** We have received a nice tumbler, manufactured by Hyland



Park, their Model 12. It is a gift of Peggy Bourgo of Potomac and belonged to her father.

It has one large drum, larger than most every other tumbler we have gotten. It is in above average condition and will be auctioned all as one lot along with a box containing some batches of grit and some rough for tumbling.

The President will announce the close of the auction and payment will be accepted by the Treasurer.



### **TEN SUGGESTIONS FOR SETTING UP WORKSPACE**

By Dalan Hargrave

From Ultratec "Sometimes Newsletter", Sep. 2012



Dalan "doing it right" in his own custom Workspace

One of the most frequently asked questions I get is "How high should I make my faceting machine?" To answer that question I always respond by focusing on the chair first. The chair is perhaps one of the most critical pieces of equipment in any faceter's workshop. The reason is quite simple of course. You are going to spend hour after hour in that chair and it needs to fit like a glove. Once you find the perfect fit chair that gives you support for your size, you can then begin measuring the rest of the setup.

Occasionally someone will ask me how high my chair is. Unfortunately that's not much help since I am 6'9" and weigh .... well, let's just say I need a serious Papa Bear chair. With all this in mind, I've put together a suggestion list for setting up a workspace that is both functional and comfortable. No matter whether you're a hobbyist or professional, having the proper setup can make faceting a more enjoyable experience. You might consider this a check list to see how your setup fits.

1. Find a suitable space you can dedicate to set up your shop. I happen to like the corner of a room so I can have shelves or storage space to the left or right of the faceting bench.
2. Get an office chair that fits your size. Raise the chair so that your knees are bent as close to 90 degrees as possible. Find one that gives you back support and arm rest if you prefer. While sitting in your properly adjusted chair you can now begin measuring and organizing the rest of your setup.
3. Adjusting the height of your faceting machine is the second most critical measurement of all. Most people I know have grabbed any old desk or table first and then tried to fit everything else around it. Remember this is only a suggestion. While sitting in your chair, try to imagine slightly nodding your head forward to comfortably inspect a stone mounted in your machine of choice. Measure the height of that stone down to the floor. Next measure your machine with the quill in your inspection position (from the stone down to the work surface the machine sits on.) By subtracting that from the first measurement you took down to the floor, you now have the height your work surface needs to be.

(Cont'd on Page 4)

**TEN SUGGESTIONS FOR SETTING UP WORKSPACE**

(Continued from Page 3)

4. Now you can begin looking for a suitable piece of furniture for your faceting machine. You might consider building your faceting machine into a desk or counter top or even building a custom fit desk. You can always add support blocks or extend or shorten legs if necessary to achieve the proper height.

5. Proper lighting can have a huge impact on the whole process. I recommend having an overhead light to light the whole area and a movable flex or arm type of light for inspecting facets as you go. A fluorescent fixture is adequate to light the general area but not for inspection. Inspection lights are highly subjective to the user. I prefer a single 40 or 60 watt soft white light bulb. Knowing how to use it is subject for another discussion.

6. While sitting in your chair with your machine situated at the proper height you're ready to start accessorizing. I suggest you start with lap storage. The word here is "convenience group". You'll be changing laps frequently and you want them close, easy to get to and protected. It's best to locate this area out of the splash zone to minimize contamination. As a rule, in a cabinet or on shelves I keep the coarse grit laps lower than sanding and those lower than polishing. This helps fight contamination since particles fall down not up.

7. Continue accessorizing with a dedicated dop station. This is where I prefer a corner with a shelf mounted at the proper height for you, to use for dopping stones and dop storage. This should be a secure location where things won't get disturbed if you use glue dopping methods or where you can store dopped stones waiting to be cut. Some place where the cat can't knock them over. Ask me how I know that.

8. Now let's think about chemical storage. Many of the chemicals used in faceting can be dangerous to children and even adults who use them. Having a secure cabinet or drawer is a must. For spray bottles with diamond, cerium, denatured alcohol and so on, you will want to keep them close at hand for use, however, they should go back in storage for safe keeping when not in use.

9. To finish accessorizing you might want a drawer for tweezers, gages and various other hand tools you will use while faceting.

10. Additional equipment you will use includes a trim saw. This is one piece of equipment I don't mind being located some distance from the faceting machine since it tends to make a mess wherever it is.

Again, these are only suggestions for those who don't know where to start with a setup. The most important thing is to take the time to make your work area fit you. It will be time well spent.

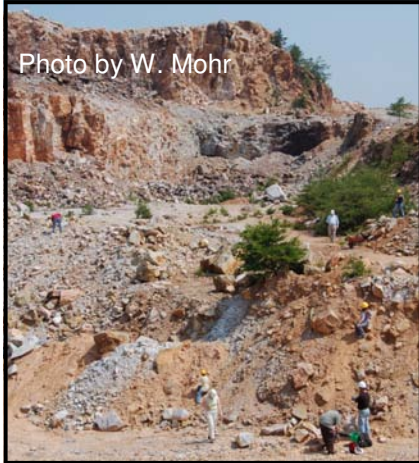


GemStarz Cut  
By Dalan Hargrave



**SOCIETY LIBRARY** Go to the Society web site at <[www.glmsmc.com/](http://www.glmsmc.com/)> and click on "Library" to see a complete listing of materials available for lending to members. Just about everything in the grand scheme of things in earth science is covered. You will find books on fossils, minerals, gems, geology and more. Contact Jonathan Harris at 301 545 0808 or <[jgharris7@gmail.com](mailto:jgharris7@gmail.com)> who can arrange to bring the requested material to a meeting and you may keep it out for one month until the next meeting, when it must be returned.

**FIELD TRIP SEPTEMBER 22, 2012, KYANITE MINING CORPORATION.**

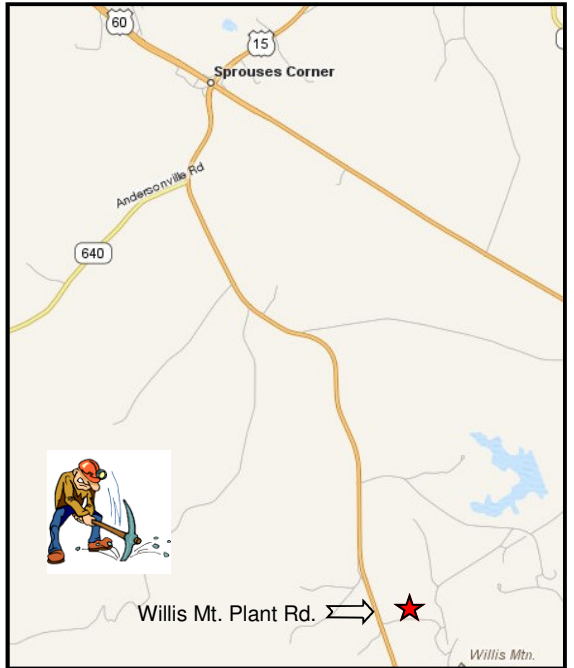


Arrive at the office parking lot 8:30 am for the required safety briefing. Collect 9 am to 1 pm. If the mine is working, we may have to limit our collecting areas. We again can be part of this multi-club field trip. This is a space limited trip. Total limit of 100 collectors from all clubs for this event. Confirm with Jonathan Harris by September 15 8 pm. If you respond after that time, you may not be able to attend.

Depending on the number of slots we are to have Jonathan may have two "lotteries." If you don't get picked in the first you will be entered into the later one. This is so Jonathan can provide some people who want more certainty ahead of time in their schedules a potential slot far in advance, but also accommodate people who don't know their schedules so far in advance. If you are uncertain about whether you will attend,

please advise Jonathan of your likelihood of attending.

**DIRECTIONS:** From Rockville take I-270 South, stay right at spur to I-495S. At exit 57A, go right onto I-95. At exit 130B, take Ramp (RIGHT) onto VA-3 (Plank Rd.) Turn LEFT (South-West) onto VA-20 (Constitution Hwy.) Turn LEFT (South) onto US-15 (Caroline St. in Orange VA.) Pass through Dillwyns. From Sprouses Corner (at intersection with US60) go South on US 15 (South James Madison Highway) about 4 miles to Willis Mt. Plant Road. Turn left. (If you pass Janie Luther Lane on the right, go back to previous intersection) Stop at the stone mine office and park out of the way so as not to block traffic. Summary: about 155.0 miles (3.5 hours.)



Wait in the parking lot. Many trucks may be using the road. While you're waiting, be sure to enjoy the beautiful blue kyanite bolder in the front yard from the old closed Baker Mountain.

**COLLECTING:** Willis Mountain is what's known as a monadnock. The kyanite exposure resisted weathering and, as the surrounding area was eroded and weathered away, the mountain outcrop was left standing. This is very much like the famous Graves Mountain kyanite mine in Georgia. The center of the mountain has been mostly mined away. We should be able to find plenty of white kyanite blades in the massive kyanite quartzite, pyrite, quartz, hematite with some iridescent red mica, apatite and possibly some blue kyanite and pale green trolleite. Some of the white kyanite here fluoresces a beautiful light blue as well as some of the quartz.

**AGE LIMIT:** There is no age limit, but all children must be signed for and supervised by an adult.

**WEATHER:** The trip will be canceled in case of hard rain or a thunderstorm. Call to confirm if there is any question.

You need to agree to Jonathan's Rules, Assumption of risks, Waiver, and Indemnification agreement.

**FUTURE ROCKHOUNDS OF AMERICA (The MOCKS)** Ages 10-15.**Next Meeting Date:** September 10, 2012. **Meeting time:** 7:45 - 9:00 pm.**Meeting Location:** Sunroom Cafeteria at the Rockville Senior Center**September 10<sup>th</sup> Meeting:**

The first few minutes of the meeting will be devoted to catching up from our summer break – if anyone has completed any summer assignments – please bring the completed work to the meeting for review and track.

**Colored gemstones** are the topic for this meeting. How do they form? What gives them their color? What makes them so special? How do we judge their quality? What is the history behind some of the more important stones? We will discuss these questions and more at our first meeting after the summer break. Welcome Back!

For more information on the Future Rockhounds of America program, please contact Holly McNeil at <fra\_advisor@glmsmc.com> or 301-605-7179.

**MINI MINERS** Ages 6-9**Next Meeting Date:** September 10<sup>th</sup>, 2012 **Meeting time:** 7:00 - 8:00 pm**Meeting Location:** The Card Room at the Rockville Senior Center

No Specific program has been decided so come and be surprised!

For more information contact Linda Smith 301-530-5007 or <Tunacat107@aol.com>

**ART AND PHOTOGRAPY CONTEST** In conjunction with the National Fossil Day, October 17, 2012, there is a contest by partners including the National Park Service and American Geosciences Institute. Open to U.S. residents of any age, the theme is "Careers in Paleontology."

If you are good at drawing, painting, or sculpting, you could help to bring fossils to life through your artwork. If you are good with computers, cameras, and other technological devices you could use state-of-the-art equipment to document and analyze fossils. Interests in geology, biology, chemistry, physics, engineering, natural history, and even outdoor recreation are applicable to many facets of paleontology!

All artwork must be able to fit inside a 13" x 17" envelope or smaller. If submitting a digital photograph, the image should be between 100 KB and 2 MB in .jpg format. All submissions must be **postmarked by Friday, October 5, 2012**. There are age categories.

For detailed information about how to enter, rules and requirements, past winners, etc., see <[http://nature.nps.gov/geology/nationalfossilday/art\\_contest.cfm](http://nature.nps.gov/geology/nationalfossilday/art_contest.cfm)>.

Noodle around that website for lots of other interesting information.



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| HACKMANITE | AUTUNITE     |
| ROWAN      | AURICHALCITE |
| PYRITE     | ARAGONITE    |
| HALITE     | AQUAMARINE   |
| FRANKLIN   | APOPHYLITE   |
| DVESS      | APATITE      |
| CRYSTAL    | ANDRADITE    |
| BRACHIOPOD | AMOSITE      |
| BORNITE    | AMETHYST     |
| BLOODSTONE | AMBER        |
| BELEMNITE  | AMAZONITE    |
| ZARATITE   | AGATE        |
| TOURMALINE |              |
| BARITE     |              |

**WORD SEARCH**

by Ed Loveland

Delaware Valley Earth Science Society

June 15, 2011

**BE ENVIROMENTALLY SOUND!** If you receive the *Rockhounder* **both** by e-mail and mailed hard copy, please reconsider. Are you willing to receive the newsletter by e-mail only? This saves considerable printing and mailing costs and preparation time, so let the editor know if you want to save money for the Society and also "Go green." The internet copy is in full color, easier to read and you can scale it up if it is easier for you to view it enlarged.

**NAME BADGES** You may have noticed that some members have nice blue badges with the Society logo. What a nice way to get to better know members! New members are given the opportunity to purchase them for \$5.25 each. All members are strongly encouraged to have and use one. It has been called to the attention of the Board that some members do not remember being asked, and perhaps the question even missed some long time members. Other long-time members may have lost or broken their badge. See the Membership Chair, Doug Baum, who has the forms for ordering them.

**LAPIDARY & JEWELRY CLASSES** Location: PLG workshop, 169 Defense Highway (lower level) Annapolis, MD. There are Class and Materials fees. New fall class offerings by the Patuxent Lapidary Guild:

- Forged 14K gold and sterling bracelet, Saturday October 13, 9-5.
- Torch fire enameling, Sunday October 28, 9-5.
- Foldformed earrings and cuff bracelet, Sunday November 4, 9-5.
- Brooch with pin back, Sunday Nov 11, 9-5.
- Forged stone cuff bracelet, Saturday November 18, 9-5.

For all of the above Register with Donna Madej, at <littlewings@mdonline.net> or 410-215-1774.

Hand Tools 101, Sunday October 24, 9-4, Register with Cheree Craze, at <loudroar@comcast.net> or 410-733-7487.



**September 15 - 16**, 47th Annual Show by the Central Pennsylvania Rock & Mineral Club, Zembo Shrine, 2801 N. 3rd St., Harrisburg PA 17110. **EFMLS** Meeting Friday September 14th. For information see: <<http://www.rockandmineral.org/>>.



**47th ANNUAL GEM MINERAL & JEWELRY SHOW**  
<http://www.rockandmineral.org>

**SEPTEMBER 15 and 16, 2012**  
SAT. 10 am - 6 pm SUN. 10 am - 5 pm

**ZEMBO SHRINE**  
THIRD AND DIVISION STREETS, HARRISBURG, PA

**Vendors of Jewelry, Beads, Gemstones, Minerals and Fossils**

CHILDREN'S ACTIVITIES PRIZES EDUCATIONAL EXHIBITS

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Maximum Value \$2.00  
CHILDREN 12 AND UNDER AND SCOUTS IN UNIFORM FREE WITH ADULT

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**48th Annual Atlantic Coast Gem, Mineral & Jewelry Show**  
Howard County Fairgrounds  
I-70 at MD Rt. 32

Award-winning displays of jewelry, gems, minerals, fossils, and lapidary art. Choice rough, slabs, tools, finished gems, minerals, fossils, beads and jewelry for sale. Demonstrations show how to make your own beautiful jewelry and finished stones. Visit our website <[www.gemcuttersguild.com](http://www.gemcuttersguild.com)> for news about our classes and show.

September 22 23, 2012

Hours:  
Saturday: 10 A.M. - 6 P.M.  
Sunday: 10 A.M. - 5 P.M.

Visit our website....  
<[www.gemcuttersguild.com](http://www.gemcuttersguild.com)>  
for news about the show and our jewelry and gem cutting classes.

Gem Cutters Guild of Baltimore, Inc.

The Gem Cutter's Guild of Baltimore show is at the Howard County Fairgrounds, MD 32 at I-70, West Friendship MD.

**September 28-30**, 56th Annual Paul Desautels Micromount Symposium hosted by the Baltimore Mineral Society. Information and registration at <[cscrystals2@gmail.com](mailto:cscrystals2@gmail.com)>.

**October 27**, South Penn Rock Swap sponsored by the Central PA Rock & Mineral Club and the Franklin Co. Rock & Mineral Club. South Mountain Fairgrounds, 615 Narrows Road, Biglerville PA.

**November: 17 - 18** 21st Annual Gem, Mineral & Fossil Show. Sponsored by the Northern Virginia Mineral Club. George Mason University, Student Union Bldg. II (The Hub), Rte. 123 & Braddock Rd, Fairfax, VA. Map: <<http://eagle.gmu.edu/map/fairfax.php>>. Sat. 10 am - 6 pm, Sun. 10 am - 4 pm. Silent Auction on Sunday. Admission: Adults \$5, Seniors \$3, Teens (13-17) \$3, Children (12 & under) Free, Scouts in uniform Free, GMU Students w/valid ID Free. Parking: On campus use GMU's parking Lot A. Enter Lot A from Nottaway River Lane where you will also find the courtesy shuttle to the Mineral show. Information <[www.novamineralclub.org](http://www.novamineralclub.org)>.

**ADVANCED GEMOLOGY CLASS:** begins Wed., Sept. 12, from 10 am -12:15 pm at the Potomac Community Center and runs for several weeks into December. Adults: Prerequisite: Beginner Class. Interested in gemstones, but already know a little something about them? Want to learn more? Curious about gemstone lore and stories? This class examines gemstones and gemstone groups. Examples and hands-on specimens to "play" with each morning. Perhaps a guest speaker, maybe even a field trip. **10 Sessions \$97** Instructor: (Our member) Timothy Morgan, who you can contact for information at 301 983 3747 or <[timothyemorgan@mac.com](mailto:timothyemorgan@mac.com)>

What about the Introductory or Beginner Gemology class? It is not listed anymore because there has been no registration for it. A minimum of 4 people is required to do the class. The course would be offered if four or more of you indicate an interest to Tim.

<<http://www.gemstonesfromtheearth.com/>> is Tim's dealership web site. As is our custom, we do not endorse commercial sites.



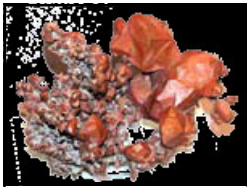


## THE COLOR OF CRYSTALS

From The Roc Sac, June 2009 via The Gem Cutter's News September 2009

The color of a crystal can be its most striking feature. The causes of color are varied, and many minerals occur in a range of colors. Something looks a particular color largely due to your eye and brain reacting to different wavelengths of light. When white light (daylight) falls on a crystal, some of the wavelengths may be reflected, and some absorbed. If some are absorbed, those remaining will make up a color other than white because some of the wavelengths that make up white light are missing. Sometimes light is absorbed and re-emitted without changing and the mineral will appear colorless.

### Idiochromatic



Copper,  
Keweenaw  
Peninsula, MI

Some minerals are nearly always the same color because certain light-absorbing atoms are an essential part of their crystal structure. These minerals are described as idiochromatic. For example, copper minerals are nearly always red, green, or blue according to the nature of the copper present. Sulfur is an idiochromatic mineral and normally crystallizes in bright yellow crystals. These are found as encrusting masses around volcanic vents and fumaroles (gas vents).



Sulphur  
Steamboat Springs Dist.  
Washoe Co. NV

### Allochromatic

A large number of minerals occur in a wide range of colors caused by impurities or light-absorbing defects in the atomic structure. For example, quartz, diamond, beryl, and corundum can be red, green yellow and blue. These minerals are described as allochromatic. Rhodochrosite: Manganese minerals such as rhodochrosite are usually pink or red. The bright red color of some beryls is due to tiny amounts of manganese. Cobalt minerals, such as Erythrite are usually pink or reddish. Trace amounts of cobalt may color normally colorless minerals.



Rhodochrosite  
Butte, MT

When exposed to invisible ultraviolet light, some minerals emit visible light of various colors. This is called fluorescence, usually caused by foreign atoms called activators in the crystal structure. The fluorescent color of a mineral is usually different from its color in daylight. The feldspar mineral Labradorite can occur as yellowish crystals, but more often it forms dull gray crystalline masses. Internal twinning causes interference of light, which gives the mineral a sheen, or schiller, with patches of different colors.

A space in the atomic structure of a crystal, caused by a missing atom, can form a color center. Coloration of common salt is thought to be caused by this. The color in some minerals is really a play of colors like that seen in a oil slick or a soap bubble. This may be produced when the light affected by the physical structure of the crystals, such as twinning (two crystals of the same mineral that are joined at a common crystallographic plane) or cleavage planes (form along the weakest plane) or by development during growth of thin films. Microscopic "intergrowths" of plate-like inclusions (during growth, crystals enclose crystals of other minerals) also interfere with the light.

Reference: Crystal and Gem by Dr. R. R. Harding. Alfred A Knopf, New York, 1991.

### NEW BOOKS JUST PUBLISHED:

*Shove the Rock Aside!* By Eve Ho

*Collecting Errors and Accidents* by Miss Takes and Miss Haps

*The Micromount Society* by Les Ismoor

*Collecting High on the Mountain* by Andover Hand

*As Solid as...* by Rocco Gibraltar

*High Mountain Acrophobia Explained* by Alfredo Heights

*Collecting Six Feet Under* by Doug Graves

*Designing Fashion Jewelry* by Madge Ination

## AMERICA THE BEAUTIFUL QUARTERS PROGRAM BY THE U. S. MINT

The Mint Launched the Hawaii Volcanoes National Park Quarter on August 29th at the Kilauea Visitor Center. Each year, the public will see five new national sites depicted on the reverse (tails side) of the America the Beautiful Quarters. The Mint will issue these quarters in the order in which the honored site was first established as a national site.



### BENITOITE

By Bob Farrar

Benitoite is a rare mineral, and there is only one significant locality where it is found. However, it is a special mineral in many ways that is well worth learning more about.



Benitoite is in the silicate group of minerals, consisting of barium titanium silicate,  $BaTiSi_3O_9$ . The crystals of Benitoite are absolutely unique: hexagonal-ditrigonal bipyramidal. They typically form flattened triangles. Prior to the discovery of Benitoite in 1907, mineralogists had theorized that this crystal class was possible, but there were no known natural examples. Benitoite is usually "sapphire" blue, and was mistaken for sapphire when first found. Rarely, it can be white, yellow, or pink. Other physical properties include a

hardness of 6.0 to 6.5, and a specific gravity of 3.7. It is also fluorescent blue under short wave UV light. The crystal form is entirely sufficient to distinguish Benitoite from any other mineral.

The only significant locality for Benitoite is San Benito Co., California, for which it was named. The type locality is the Dallas Gem Mine; other mines in the same area include the Junnila Mine and the Numero Uno Mine. There it is found in veins of natrolite cutting through serpentine. Crystals up to 2 inches have been found. Associated minerals include neptunite and joaquinite. Older books state that these are the only known localities for Benitoite; it has since been found at Ohmi, Japan; Esneux, Belgium; and Magnet Cove, Arkansas; but none of these localities approaches the significance of San Benito Co.

Cleaner crystals of Benitoite can be faceted into beautiful gemstones. As a crystal, it is popular among mineral collectors. However, the supply of both gemstones and mineral specimens is limited, and good pieces can be hard to find.

So, if you do have such a piece in your collection, you may consider yourself fortunate.

(Photo is by Didier Descouens, available from Wikipedia Commons at [http://en.wikipedia.org/wiki/File:Benitoite\\_HD.jpg](http://en.wikipedia.org/wiki/File:Benitoite_HD.jpg), and is used under the Creative Commons Attribution-Share Alike 3.0 Unported license.)

From The Rostrum Newsletter of the Maryland Geological Society September, 2011



**We Will, We  
Will Rock You!  
Fossil Petrified  
Rockhounds**



Love a mineralogist - Just don't take them for granite.

Love a beader - They'll string you along.

Love a faceter - They're a cut above.

From Chipper's Chatter Sept 2010

This pencil may be #2 but these sites are #1



**WEB SITES**

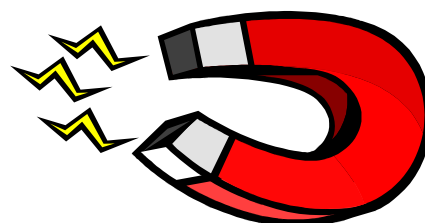
By Wendell Mohr



**The Many Uses of Gold,**

<<http://geology.com/minerals/gold/uses-of-gold.shtml>>, is by Hobart King. At this site you will find a compendium of uses including but not limited to jewelry, coinage, electronics, dentistry, awards, and glass making. Additionally there are links including gold information, the history of gold, how to pan for gold, and properties under “what is gold?” • A prospector went to a psychiatrist saying “I keep having hallucinations about striking GOLD!” The psychiatrist said “Let me take a lode off your mind.” I, on the other hand, wanted to be a gold prospector, but it didn’t pan out. •

**Magnetism in Gemstones** at <<http://gemstonemagnetism.com>> is by Kirk Feral, a gem collector and hobbyist in San Diego, CA. I have never crossed paths with this phenomenon. I think you will find it fascinating. The site was only launched in Spring 2011 and undergoes updates. Quite extensive, there are more topics than I will list here. It runs from an in-depth discussion of the subject, how to assemble your own Neodymium magnetic wand, to specific use for identification and a separating chart for look-alike gems. • What did the lodestone say to the other lodestone? “I’m attracted to you.” •



Stromatolite column of bacterial mats in Australia; sponge fossils are between stromatolites.  
Credit: Dr. Adam Maloof

**Discovery of Possible Earliest Animal Life** is a National Science Foundation site about sponge-like animals about 650 million years old.

See <[http://www.nsf.gov/news/news\\_summ.jsp?cntn\\_id=117502](http://www.nsf.gov/news/news_summ.jsp?cntn_id=117502)>.

“Scientists may have discovered in Australia the oldest fossils of animal bodies. These findings push back the clock on the scientific world’s thinking regarding when animal life appeared on Earth. The results suggest that primitive sponge-like creatures lived in ocean reefs about 650 million years ago, 90 million years earlier than previously known.” • One day while working as a guide in the NMNH, I noticed a couple come in who obviously had different interests. She immediately became engrossed in the fossil exhibits, while he lingered about in the rotunda area, looking disgruntled. The museum board

likes to know how travelers become aware of us, so I engaged the sullen visitor in conversation and asked, “How did you find our museum?” Gruffly he responded, “I made a wrong turn.” •



**Protect the Hands**

**Fashionable 1890’s Collecting Attire**



**Hard Hat?**



**Appropriate Boots**

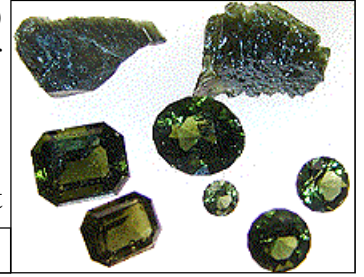
**MOLDAVITE**

By Clyf Bourne, Sr. (Now deceased)

This is a beautiful, green tektite (glass), probably the result of a meteor shower scattered over a wide area including the Moldau (German; Vltava is the original Czech name) Valley in what is now the Czech Republic.

Thought to have occurred 15 or 20 million years ago, (one source maintains it is exactly 14.8 million), the actual impact zone is said to be in Austria. The surrounding earth material was fused by the

Photo by the Author



pressure induced heat and catapulted back into the atmosphere. Sculptured and scattered by the atmosphere, the pieces landed over a wide area, hundreds of kilometers, including the Moldau Valley.

The resulting shapes and surface pitting and molding are interesting features. Some have air bubble inclusions. Because of its beauty and rarity, it commands a good price, \$25/ct [2003 price - Ed.] and up. (May I interject here that this river valley, for which Moldavite is named, is the location of the same river for which Bedrich Smetana (1824-1884) composed the beautiful music, The Moldau.)

Our only known extra-terrestrial gemstone, Moldavite has been valued for thousands of years. This single known location\* in the world supplies, probably, the rarest of all the gemstones. While moldavite is dug from the ground in several valley localities, the most famous are at Besednice and Chlum.

Physical properties: The composition varies, usually silica glass with impurities Mn, Fe and other elements. Specific gravity, approx. 2.5. Vitreous to dull luster, the refractive index is 1.48 -1.5. The Moh's scale hardness is 5 or 6. There is no cleavage but fracture is conchoidal. Structure is amorphous.

The US Bureau of Mines Dictionary\* mentions "Bouteillenstein" is a peculiar green glass found as rolled pebbles. Called also, "bottle stone," "psuedo chrysolite" (from its resemblance to olivine) - is this an early term for moldavite?

Some believe moldavite is the green stone in the Holy Grail. From the past to the present, there are those that believe it has special powers when held, warmth, pulsation and "pulling energy." Those of a metaphysical bent, believe possession of the stone can improve one's lifestyle and improve spiritual growth.

References: CD-ROM: US Bureau of Mining, Mineral and Related Terms, 1996

Web Pages: <<http://www.thebrazilianconnection.com>>, <<http://www.taiwan.com>> [Broken link - Ed], and <<http://www.wehug.com>>. From Shin Skinner's News March 2003

[\*EDITOR COMMENT:] Per Wikipedia, Moldavites are but one class of tektites from one locality.

Below are tektites, grouped according to the four known strewn fields, and their associated craters:

European strewn field (Nördlinger Ries, Germany, age: 15 million years):

Moldavites (Czech Republic, green)

Australasian strewn field (no associated crater identified; but see Wilkes Land crater and above references):

Australites (Australia, dark, mostly black)

Indochinites (South East Asia, dark, mostly black)

Chinites (China, black)

North American strewn field (Chesapeake Bay impact crater, USA, age: 34 million years):

Bediasites (USA, Texas, black)

Georgiites (USA, Georgia, green)

Ivory Coast strewn field (Lake Bosumtwi Crater, Ghana, age: 1 million years):

Ivorites (Ivory Coast, black)

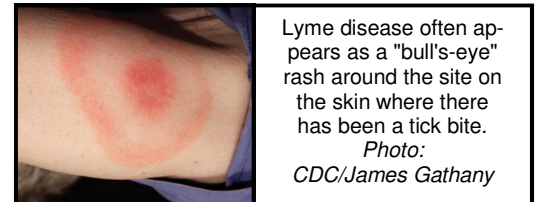
**SAFETY NOTE -TICKS** Take precautions until well after first hard frost.

**Ticks** are small, insect-like creatures that can attach to you as you brush past bushes, plants, and grass. Once on you, ticks often move to a warm, moist location, like the armpits, groin, and hair. At that point they typically attach firmly to your skin and begin to draw blood. Ticks can be fairly large - about the size of a pencil eraser - or so small that they are almost impossible to see. Ticks can cause a variety of health conditions ranging from harmless to serious.

If you spend time outdoors or have pets that go outdoors, you need to beware of ticks. Ticks are bloodsucking parasites. Many species transmit diseases to animals and people. Some of the diseases you can get from a tick bite are Lyme disease, Ehrlichiosis, Rocky Mountain spotted fever, Colorado tick fever and Tularemia

To help **protect yourself and your family**, you should:

- Use a chemical repellent with DEET, permethrin or picaridin.
- Wear light-colored protective clothing.
- Tuck pant legs into socks.
- Avoid tick-infested areas.



Lyme disease often appears as a "bull's-eye" rash around the site on the skin where there has been a tick bite.  
Photo:  
CDC/James Gathany

Check yourself, your children and your pets daily for ticks and carefully remove any ticks you find.

- Do NOT try to burn the tick with a match or other hot object.
- Do NOT twist the tick when pulling it out.
- Do NOT try to kill, smother, or lubricate the tick with oil, alcohol, vaseline, or similar material.

If a tick is attached to you, follow these steps to remove it:

1. Grasp the tick close to its head or mouth with tweezers. Do not use your bare fingers. If needed, use a tissue or paper towel.
2. Pull it straight out with a slow and steady motion. Avoid squeezing or crushing the tick. Be careful not to leave the head embedded in the skin.
3. Clean the area thoroughly with soap and water. Also wash your hands thoroughly.
4. Save the tick in a jar and watch carefully for the next week or two for signs of Lyme disease.

If all parts of the tick cannot be removed, get medical help. Bring the tick in the jar to your Doctor's appointment.

### Prevention

- Wear long pants and long sleeves when walking through heavy brush, tall grass, and densely wooded areas.
- Pull your socks over the outside of your pants to prevent ticks from crawling up inside.
- Keep your shirt tucked into your pants.
- Wear light-colored clothes so that ticks can be spotted easily.
- Spray your clothes with insect repellent.
- Check your clothes and skin frequently while in the woods.

After returning home:

- Remove your clothes and thoroughly inspect all skin surface areas, including your scalp. Ticks can quickly climb up the length of your body.
- Some ticks are large and easy to locate. Other ticks can be quite small, so carefully evaluate all black or brown spots on the skin.
- If possible ask someone to help you examine your body for ticks. An adult should examine children carefully.



Adapted from National Institute  
of Health's MEDLINE PLUS  
By Editor

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