

The BACKBENDER'S GAZETTE

The Newsletter of the Houston Gem & Mineral Society Houston, TX

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February 2011



President's Messageby Steve Blyskal

y now most of you have heard about the incident and explosion on December 18 that damaged the jewelry classroom and the ceiling above it. Fortunately no one was hurt in the explosion of a butane torch refill container, but almost everyone agrees we dodged a bullet in that regard. As a result of the incident, Clubhouse Chairman Neal Immega and the shop foremen will introduce new rules and procedures regarding the use of butane torches and their refills. If you have a torch of this kind and plan to use it in the jewelry classroom, you need to see Neal or



one of the shop foremen for the new procedures. The insurance adjuster and property damage appraiser have come out to view the damage, and we received a settlement offer from the insurance company. One of our members brought up the idea of replacing the existing hanging ceiling with a solid insulated ceiling with sheetrock inside and plywood above which would be load bearing and would extend the usable storage space in the attic. That plan has been presented to and accepted by your Board of Directors, and Neal Immega will be in charge of acquiring the needed materials and people to make this happen. Expect to see some ongoing construction over the next couple of months.

The incident in the classroom has prompted the Board to request a safety audit of the clubhouse to discover any other safety issues we need to address. While a member with

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Upcoming Program

anuary 25, 2011: Tour of Scotland: Nathalie Brandes will offer us a photographic tour of the countryside and will feature facts on Scottish Geology, Archeology, and History, along with a colorful tale about Robert the Bruce. Its going to be good--best not miss it!

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Every article published in the BBG is edited for grammar and content. No flaming is allowed.

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Purpose of HGMS

he objectives of this Society are to promote the advancement of the knowledge and practice of the arts and sciences associated with the collecting of rocks, minerals, fossils, artifacts, and their identification and classification; the general lapidary art; the collecting and identification of gemstones; the designing and execution of jewelry or metalcraft; and to provide the opportunity to obtain, exchange, and exhibit specimens and rough or finished materials.

Membership dues are \$40 for an adult membership, \$60 for a couple, \$75 for a family (including all children aged 5-18), \$25 for a youth membership (ages 5-18), and \$500 for an adult life membership. Advertising rates: \$70 for 2 months, \(^{1}4\) page; \$150 for 6 months, \(^{1}4\) page.

MEMBER: American Federation of Mineralogical Societies & South Central Federation of Mineral Societies.

All meetings are held at the Clubhouse which is located at 10805 Brooklet near the intersection of Highway 59 (Southwest Freeway) and Sam Houston Parkway (Beltway 8). See the calendar inside the back page for when the different Sections meet. The General Meeting is the fourth Tuesday of each month at 7:30. The HGMS Web site address is http://www.hgms.org.

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safety experience has been assigned to do this, we ask that members also look around for any safety issues when they are at the clubhouse. We would appreciate any feedback from the members, either through your Section Board Representative or directly to me.

The club Board and I as President hope to make the clubhouse a better place for you to come to meetings and to work on your projects in 2011. We have assigned a Quarter-master to keep track of supplies such as toilet paper and hand soap, and we have a Board member supplying soda for the refrigerator on a constant basis. (As always, sodas will continue to cost members 50ϕ each.) Soon we will be replacing the existing coffeemaker with a new thermos version that keeps coffee hot without the use of a hot plate, thus resulting in fewer hazards and better-tasting coffee. We will continue supplying refreshments at General Meetings with the presence of a "kitty" to reimburse costs, a practice initiated by Terry Proctor, our past president.

The Board and I hope that these changes meet with your approval, and we welcome any suggestions you have for continued improvements.

Recently I received my December 2010 issue of *Mineral News*, a monthly publication devoted to issues important to mineral collectors. One of the articles struck a responsive chord in me, and I want to bring this to your attention. Mitchell Portnoy wrote an article on mentoring. He brought up many good positive suggestions on how this can be done and the benefits to the mentor and to the continuation of the hobby we all enjoy. While he addressed the topic from the viewpoint of a mineral collector, fossil collectors, lapidaries, silversmiths, faceters, and people who make beaded jewelry can use the same rationale. I know many of you are already involved in mentoring, but I want everyone in the club to consider it on one level or another. I have been and continue to be a mentor for mineral collecting and mineral photography, and I plan to be more active in that effort this year. I would encourage all of you in the club to think about your areas of expertise and where mentoring efforts would pay off with more enthusiastic collectors and club members. As a mineral collector, I have benefited from being mentored by people in the Mineral Section—most particularly Art Smith—a mentor to many of us before his passing. A few years ago I became interested in petrified wood as a means of getting back into field collecting. Many members of the Paleo section helped mentor me as I gained knowledge and expertise, and now I am at the point where I can mentor some people in this area. Most recently I took up agate field collecting and preparation, and long-time members like Matt Dillon and Gary Anderson gladly shared their expertise in field collecting and preparation in the shop. You are never too old to be mentored, and you are never too old (or too young) to do mentoring. My intention is to contact Mr. Portnoy and get copies of his article that will be made available for distribution to all interested people.

One last note for this month: I urge all members to continue to work together for the betterment of the club. Put aside petty grievances and gripes that work to divide us and make the club less welcoming. Every year we lose some members who leave because

the club is not always the friendly place we all want it to be. This club should be a refuge from the everyday world, a place where we discover beauty in fossils, minerals, cut stones, and beads in a way that few outsiders can understand. We want this to continue, so let's make it happen!

Old Geezer—Angel Falls in Venezuela

by John Emerson Member of the Houston Gem & Mineral Society

ne of the times when we were living in Houston. I was Project Engineer for an oil gathering system in southern Venezuela with pipeline to the CaribbeanSea and storage and tanker loading facilities on the coast. I took Bobbie with me when I made a trip to Caracas to check the progress of the construction. While we were there, we took a small plane to see Angel Falls. The falls are the highest in the world at 3.212 feet (6/10 of a mile), and they were first described by Sir Walter Raleigh in 1596. Sir Arthur Conan Doyle wrote the book "The Lost World" about dinosaurs



living in the jungle at the top in modern times. It was made into a movie by the same name. When the plane reached the falls, the pilot headed directly into the middle of it and, at the last moment, banked and turned around! He later explained that he needed to get close so that the compressed air in front of the plane would aid in the turnaround in the narrow canyon. I told him that he needed to warn his passengers—and furnish diapers!

Photo from Google: I was too "clutched" to use our camera.

The Crown Jewel

by Noelle Skubal, age 11 Member of the Houston Gem & Mineral Society

he last time I presented you with an article, I left a rockhound cliffhanger for you. Well, here is the exciting conclusion!

As you can remember, the Skubal family was hunting topaz at the Glacier Peak Mine with another family in the mountains of Colorado.

It was midday, and most of us had spread out in different directions to dig. The father of the other family that was with us was sifting by himself on the "rich in topaz" mound. Suddenly I heard a big commotion. I ran over to where he was. He was holding a light green topaz crys-



tal approximately the size of a small Snickers candy bar. He wasn't alone by now—others had come running too.



This is how he found the topaz: he was using a sifter and it just rolled out at him. It must have been a shock for him because he had only been rock-hounding twice before. Just imagine if you had found that topaz! The mine owner's son said that he expected to find something of this quality only in Burma. Chuck (the man in charge) and the owner's son (I can't remember his name) both said it was the biggest topaz that had ever been uncovered in the mine. Also, both

of them said it's probably worth \$7,500 because it was so clear you could see straight through it.

Then the staff took it over to the makeshift table and put it on the scale. The mine owner's son dramatically held his hands underneath it all the way to the table because he was afraid of it falling on the ground and cracking, or worse, of the rock splitting in two. It was kind of silly looking, but I can understand why he did that.

After Chuck put water on it to wash the dirt off, he weighed it. The topaz totaled



about 453 carats. They offered to sell it to our friend, but he smiled and said he didn't have quite that much cash on him. He did request (since he had found it) that it be known as "the Lone Star Topaz." We never heard if they named it that.

What else is buried at the Glacier Peak Mine?

Update on Susan Lenz

by Norman Lenz

Last month marked the 5th year anniversary of Susan's first symptom of brain cancer. It has been seven months since my last update. Except for mobility, she has been slowly improving. Her MRIs have been every four months. She is still in remission. However, her oncologist will not declare her cured until she has been cancer free for 10 years. We are halfway there.

Our new Hill Country estate in San Marcos TX is about 75% complete. The exterior is finished except for porches and landscaping.



The interior tile and cabinetry are almost complete, and the walls should be painted in another week. Susan is very excited about how it is coming together and our upcoming move there.

We spent Thanksgiving in Missouri with my family and Christmas in Indiana with Susan's family. It is always good to be with family for these special days.

Positives:

- Susan's latest MRI indicated she continues to be in remission
- ➤ Her alertness is improving
- Long term memory is normal
- Verbal communication is normal
- > Appetite is great
- > She usually sleeps well at night
- > Susan has been seizure free since June, the longest period since her diagnosis five years ago
- > Medication has been reduced to a minimum and is not changing

Negatives:

- Susan can still only walk with our assistance and only for a few feet
- ➤ Her left side neglect has not improved significantly
- > Her ability to maneuver her wheelchair is limited

- Tremors vary in intensity with Susan's alertness. She always has tremors and weakness on her left side but has relatively good control of her right hand.
- Susan's ability to focus her attention for reading or study has improved slightly. She has always loved to read. It would be good if she could regain her ability to read magazines and novels without losing her place.

Photos: Our Hill Country estate, Susan, and a photo of the two of us.



We hope you had a great Christmas. Susan said to wish you a Happy and Healthy New Year! Norman





Johnson's Rock Shop, a Texas Legend

by Chris and Theresa Peek

six weeks ago, and we needed a "rock" fix. New Year's Day would be quiet—too quiet. My parents had returned to Florida, and the boys were with their grandmother. We hadn't been to Johnson's Rock Shop; oh, we had heard the stories—back off the beaten path, into the Piney Woods you might hear banjos playing off in the forest. We decided to go anyway if they were open. We called, and they would be open their



normal hours on New Year's Day. The ride isn't too bad—under two hours from Southwest Houston.



When we got there we were amazed by all the petrified wood in the front of the house and on our way back to the "rock shop." The logs are massive; many of the stumps are palm. The Shop really isn't a shop; it is a series of frontier-style buildings; at least seven of them. We were greeted by one of the Johnson's dogs, then a second dog and soon by Mr. Johnson. Mr. Johnson let us wander awhile and

then offered us a tour. He apologized for his slow pace, but said that at 87 years old the weather changes slowed him down some. We went into some of the buildings with him and even into his music building, where he entertained us with songs and poems that he wrote, performed, and recorded. We continued browsing (and shopping) on our own for awhile and ended up in the jewelry building. Mrs. Johnson wasn't feeling



well, but had come down and was there when we arrived. We had a camera with us so Mr. Johnson asked if we would take some pictures of them. We got some great shots. They make a cute couple, still in their honeymoon phase after only 65 years together.

The Johnsons are very friendly and hospitable. Mr. Johnson is very passionate about his hobbies, being a rockhound and a musician. We truly enjoyed our visit there and plan on going back soon. If you haven't been to Johnson's Rock Shop in Indian Springs (near Livingstone), you are in for a treat when you get there! They have some amazing wood on the property, a museum building containing some incredible pieces, and they have an eclectic mix of minerals, fossils, beads, jewelry, etc. Their rough is really interesting, some unusual, high-quality stuff at great prices per pound. Most of their pieces are in the inexpensive to moderate range with just a smattering of high-end items. They are open year round, except February—they'll be in Tucson for the show there and afterward they'll need some time to unload their purchases. Their contact info is:

Johnson's Rock Shop 238 N Lincoln Wiggins Street Livingston, TX 936-563-4438

BenchTips

by Brad Smith
Find more BenchTips by Brad Smith at
groups.yahoo.com/group/BenchTips/—or—
facebook.com/BenchTips

urnishing Bezels

A dapping ball can sometimes be used to burnish a bezel. I noticed this when setting some 8 x 10 cabs on a piece of filigree. It was difficult to get enough pressure with a regular burnisher, so I tried a dapping ball and found it much easier. Make sure the ball is well polished (hit it with the Zam wheel) and let it ride along the base of your piece. Select a ball big enough to hit the top of the bezel at the right angle to burnish it down onto the stone.

Super Pickle

We've all made the mistake of putting some steel in the pickle pot. This can cause all your pieces to be coated with copper. Easiest way I've found to clean it off is to fill half a coffee cup with the pickle and put in an ounce or two of hydrogen peroxide from the drug store. Throw your pieces in and the coating is gone in about 10 minutes. When finished, pour the solution back into your pickle pot.

Hints and Tips

via Gem Cutters News 1/2011 from sources as listed

reserving Iron Meteorites
by Shawne Lardin from Rockhound Rambling 2/2008
A new way to preserve your iron meteorites, especially etched ones, is to submerge them in ATF (Automatic Transmission Fluid) in a small Tupperware® container.
This prevents rust better than older methods, such as gun oil and WD-40®. For meteor-

ites in glass display cases, you can enclose a VCI (Volatile Corrosion Inhibitor) with them. These Emitters contain special compounds that evaporate, forming a very thin layer only a few molecules thick, on the surface of all metals present. For more information go to <CortecVCI.com>.

Pressure Washer:

by John McLaughlin, from Blue Agate News, 2/2008

A cheap version of a high pressure gun can be made from a brass cap that fits a standard garden hose male connection. These are generally available at hardware stores for a very low price. Just drill the smallest hole possible in the cap and you will get a fairly high pressure stream of water when the faucet is turned on. Plus you don't need electricity and the mobility of the gun is only limited by the length of the hose! This is safer for many crystals, as the water gun can remove crystals from a plate, even if one is careful.

Polyurethane Glue

Brad Simon's Jewelry Making Tips from Chips 'n Splinters, 3/2005

If you've ever used polyurethane glue, you know that it doesn't store well after being opened. To prolong its shelf life, store the bottle upside down. An easy method of doing this is to drill a hole in a block of wood just large enough for the cap end of the bottle. NOTE Always buy the smallest bottle that will suit your purpose. With this kind of glue the economy size may not be the best bargain.

Clean Files Occasionally

Files need to be cleaned occasionally. Allowing the file teeth to become clogged or collect metal chips greatly reduces file efficiency. In addition, trapped metal may scratch the work surface. To clean, hold the file by the handle with the tip resting on the bench pin. Then, brush diagonally across the file with a file card (a stiff wire brush with short bristles).

Bamboo Skewer

Placing a section of a bamboo skewer in your flex-shaft can make an excellent wood lap polishing point. File the protruding end to a point, and use your favorite rouge. The bamboo skewers are approximately 3/32" in diameter, which makes them easy to use in a quick-change handpiece. Filing the protruding end to a point helps to reach into tight places.

Filing Small Parts

Hold the jewelry firmly when filing; unstable work leads to inaccurate filing. If possible, it is best to hold the jewelry with your hand, firmly supported on the bench pin.

Small objects can be held with pliers or a ring clamp. A small pair of vice grip pliers is a useful tool to hold small parts while filing. File the teeth off the jaws before using so that you will not mar the item you are holding.

Smaller flat pieces can be placed on the cutting surface of the file, and rubbed back and forth. Hold the file steady and use your thumb for pressure and to guide the metal. Small pieces can be held against the file using a piece of gum eraser.

HGMS Entries for SCFMS 2011 Bulletin Editors' Contest

by Phyllis George HGMS Newsletter Editor

t's that time of year again when rockhound newsletter editors throughout the U.S. scour through their previous year's newsletter issues to select articles and newsletters to submit to their regional 2011 Bulletin Editors' Contest. The entries from HGMS are listed below along with their category.

Name Category		Title	Month
Phyllis George	Large Bulletin	The Backbender's Gazette	August & October 2010
Neal Immega	Advanced Adult Article	What a Crocl	July
John Anderson	Adult Article	Why We Keep So Many Rocks That We Have Collected Or Purchased	October
Karen M. Burns	Adult Article	What Price Is the Right Price	April
Karen Burns	Adult Poetry	Who Knew	May
Edward Clay	Adult Poetry	When We Were Young	December
Owen Martin	Adult Poetry	Loralei Upon the Stone	October
Mary Ann Mitscherling	Adult Poetry	Where Shiny Heart Cabs Come From	August
David M. Orchard	Adult Poetry	Actinolite	April
Chris Peek Adult Poetry		The Ogre in the Shop	August
Noelle Skubal (10 years old)	Junior Poetry	An Ode to Back Benders	March
Steve Blyskal	Feature	A Visit with Two Australian Collectors	December
John Emerson	Feature	Old Geezer—Miscellaneous Memories	June
Sarah Metsa	Feature	Trip to Franklin, North Carolina	December
Terrell William "Terry" Feature		What Your Fossils Can Tell You—Vertebrate Morphology, Pathology, and Cultural Modification A Book Review	August
Stephen Wilkerson	Feature	My Georgia Vacation	July
George Wolf	Feature	Just 10 Inches Tall, But She Stole My Heart	January

Presents Made Easy

by Neal Immega Member of the Houston Gem & Mineral Society

ancy was talking to one of her friends in the shop, "I told Bob [her husband of 20 years] that I really liked the rutilated quartz I saw at the show, and he said okay. After the show we were looking at our purchases, and he pulled out two pieces of quartz with dramatic yellow rutile threads inside. Bob proceeded to announce "This one we put on the shelf and this one is for you." I was thinking I would get a finished piece rather than a fist-sized hunk of rough."

I recounted this story to Bob, and he said "She has taken courses in lapidary and silversmithing. She should be able to make her own jewelry from now on." I can personally attest that she is doing just that.

Yes! It's a new world order. Husbands, cast off your chains (or give them to your wives) that bind you to the shop. No more guessing and then slaving for days to produce it. Just point her to the tool chest full of prime rough and say "Make whatever you like!"

I wrote this article because I have had dozens of HGMS ladies take my "Simple Silver Soldering Class" to get the skills to do work with a torch. When I showed this article to some of them they stated firmly "He had better continue to make me jewelry!" Maybe the world is not as topsy-turvy as I thought.

Mineral Section

by Steve Blyskal, Chairperson & Dean Lagerwall, Assistant Chairperson

he Mineral Section meets on the 1st and 3rd Wednesdays of each month at 7:30 p.m. in the HGMS Clubhouse. All are welcome.

Upcoming Meeting Topics

February 2: DVD of attendees' choice. Due to the participation of many Mineral Section members in Tucson, those not able to attend will chose a DVD from the Library to view. The tentative choice is to continue with another part of the 2010 "What's Hot in Tucson."

February 16: Tucson Show & Tell. For those who were lucky enough to attend the most famous mineral gathering in the world, bring in your recent acquisitions from the many Tucson Shows. Give us your impressions of "Tucson 2010," and regale us with your experiences. For those who could not make it, come and see what you are missing. Refreshments will be provided.

March 2: Clear Lake Show & Tell. Bring in your recent acquisitions from the Clear Lake Show (February 26–February 27). Let us drool over your acquisitions. Specimens that did not make it back from Tucson for the previous meeting will also be discussed. Refreshments will be provided.

If you have any topics or ideas you wish to have presented or would be willing to present at our Mineral Section meetings, please contact Dean at dean_lagerwall@yahoo.com or (979) 480-9373.

Day Light Section by Frances Arrighi

y computer's hard drive died, and it's being sent off to specialists who will try to reclaim any files that might still be on the drive.

Thope my computer will be in better shape next month.

Archeology Group Minutes

January 6, 2011 by Secretary, Melissa Sambrooks

The meeting was called to order by Temporary Chairman, Garth Brooks, M.D. Temporary Secretary, Sunday Bennett was not present to present the minutes of the December 2, 2010 meeting. However, the minutes had been published in the January BBG and were approved as published.

The first order of business, after some visiting by all present, was to have each of the fifteen persons present introduce themselves and give some background. There were eleven HGMS members present and four visitors, one of whom had already filled out an application to join. The other two indicated that they intended to do so. So the new Archeology Group is becoming a recruiting place for new HGMS members. Visitors were Brian Carr, Keith Chandler, Jon Hart, and Robert Samer. Several persons who have attended the first two meetings were unable to attend this meeting, hence the active members now are probably over 20 for this new Group.

After introductions, the next order of business was to hold an election for the permanent 2011 Officers of the Archeology Group. There was some discussion, and the consensus was to have a Chairman, Vice-Chairman, and Secretary, and to elect a Treasurer in case the Group during the year decided to raise any money. Garth Brooks, M.D. was nominated for Chairman by Terry Proctor, seconded by Angela Smith, and elected by unanimous vote. Terry Proctor was nominated for Vice Chairman by Nancy Fisher, seconded by Melissa Sambrooks, and elected by unanimous vote. Melissa Sambrooks was nominated for Secretary by Terry Proctor, seconded by Mike Dawkins, and elected by unanimous vote.

The evening's program was to have been presented by Sunday Bennett of a dig in England from a PBS program. However, Sunday was not present nor did she contact the Chairman or Group. So a program substitution was provided. Terry Proctor did a very short presentation on "The Bone Wars," a program he has presented to schools, scouts, and to others as part of the HGMS Outreach Program.

Jon Hart brought with him four cases of arrowheads, most of which he had purchased and placed into very ornate cases in really nice displays. He discussed the age of the

various points. He discussed identification of points and locations where points could be dug on a pay or share basis.

Chairman Garth Brooks discussed finding coins in ancient locations both in Europe and Asia and in the U.S. This was a very enthusiastic meeting, and several visitors plan to join HGMS and be part of the Archeology Group. The next meeting will be Thursday, February 3, 2011 at 7:30 p.m. at the HGMS Clubhouse.

Cutting Ethiopian Welo Opal

by Steve Newstrom

from The Opal Express, December 2010, via Gem Cutters News 1/2011

number of our Guild members purchased Ethiopian Welo Opal from Maryann at our last two shows. As many of us soon discovered, the material is hydro phane opal and the wonderful play of color tends to disappear when the opal is cut. I found this article in The Opal Express, newsletter of the American Opal Society and thought it would be of interest to those of us having some of this material.

The new opal deposit in Ethiopia, in Welo Province in the north of the country, is producing spectacular crystal opal displaying very bright play-of-colors in a variety of patterns. The opals in this new deposit, discovered in 2008, are nodule-like stones in an unusual variety—where some stones resemble top Mexican fire opal with excellent play-of-color, others resemble subtle dream-like stones from Brazil and many resemble bright crystal opal from the Andamooka opal field of South Australia. It's quite easy to become enamored with this opal.

Most of the opal from Welo is hydrophane opal. Hydrophane opal quickly absorbs water and the opal's base color appearance changes, becoming very clear. The play-of-color, though not entirely disappearing, fades out. But luckily this is only a temporary problem—when the opal is allowed to air-dry for 3-4 days, almost like magic, the body color and play-of-color return to normal. Some of this opal becomes white when going through its drying process, but it too returns to its normal crystal or semi-crystal state, although it may take a few days longer to become clear again and for the play-of-color brightness to return.

Please read the following procedure carefully before cutting this opal!

Cabbing: When cutting this material, I use Elmer's Glue-All to glue the stone to a 1/4" x 5" long wooden dop stick. Let the stone dry overnight, then coat the non-waterproof glue with a coating of clear fingernail polish to make it waterproof. Avoid using dopping wax—especially if the opal has been exposed to and has absorbed water. Cracks can appear between the clear hydrophane portion of the opal and the still fiery portion of the opal when partially wetted opal is heated. So be aware that this material can be

Get last-minute news about club events by sending a note to Neal Immega at n immega@swbell.net.

VERY heat sensitive. I use a 220-grit diamond grinding dry wheel to rough grind the stone—dry. Opal's relatively soft, and a 220-grit diamond wheel cuts fast enough and also doesn't leave the deep scratches (and won't be as likely to chip) that an 80- or 100-grit wheel will—especially when working dry. Watch for heat and dust (you might want to use a mask if you're doing a lot of opal cutting—opal dust can cause silicosis), but with light pressure on a diamond wheel, opal doesn't heat much. But it is important to check your stone's temperature often.

I like to do the rough grinding dry, allowing the stones play-of-color to stay bright to properly orient and rough shape the stone. (If the stone has a uniform fire pattern throughout, orienting is not a problem and rough grinding can be done



wet.) But once that is completed, I go to my normal water-cooled method of opal cutting using a 320 grit belt on an expanding drum for final shaping of the stone. And 600-grit will remove any leftover flat spots and coarse scratches—then onto 1200-grit and 3000-grit with a final polish using a mix of tin oxide and Linde A (10:1 ratio)—or 14,000 grit diamond. If you'd like, a disk with 50,000-grit diamond will give you a super final polish. Remove the fingernail polish coating by swirling in a jar with acetone in it for about 20 seconds (careful—acetone is VERY flammable). Soak in a glass of water for 2–3 hours, and the stone should fall off of the dop stick. If not, let the stone soak in water overnight. I've never had a problem releasing the opal if it is allowed to soak in water overnight.

Drying Welo Opals: Here in Billings, the air is very dry and Welo opals return to their original bright colorful state after drying for days. But I've recently spoken to an opal customer who lives in a humid area, and his cut Welos have taken an extended time to return to their original bright colorful condition after wet cutting. His solution sounds scary, but he's had good luck (a dozen good stones at this writing). He uses a programmable burnout oven and sets the temperature for 65–70 degrees Celsius. He programs the heating cycle to warm at 2C/minute and leaves the stone at temperature for 1 hour and then allows the stones to cool down naturally. His stones have dried beautifully without a problem.

Dry Cabbing: This procedure isn't for the faint of heart as it's still not a proven method of cutting Welo opal—so beware and be VERY careful of heat build-up. I've been

experimenting with cutting opal completely dry—except for moistening the polishing wheel slightly—when using tin oxide or cerium oxide on leather, to improve polish. Tin or cerium doesn't seem to work well completely dry. But diamond compound with a bit of baby oil or extender fluid, should be fine for polishing—perhaps better than tin or cerium (I'm old fashioned, and I have a lot of tin oxide). I dop the stone to the wooden dowel using Elmer's Glue-all, as previously mentioned, but no fingernail polish is needed as this is essentially cutting dry. Again, watch carefully for heat build-up—this opal can be very heat sensitive. And if you are using Nova wheels or expanding drums with diamond/resin bonding, beware of sharp edges on your stones peeling off the abrasive coating on the wheels or belts—water provides lubrication for the belts and wheels, so this may decrease your diamond abrasive wheel life. The dust coming off the stones can be dangerous as it causes silicosis!! So be sure to at least wear a good dust mask. The results of cabbing dry have been encouraging—no color change to wait on. But the jury is still out. I need to cut a few more stones to see how well this works on a variety of Welo opal types. To remove the stones from the dops, I simply use a fine jewelers saw to cut the stones off of the sticks, at the stone-stick glue interface, Then sand off any extra wood or glue on fine (400-600 grit) wet/dry sanding cloth or a dry flat checking often for heat.

Carving: If you plan to carve this opal (it carves wonderfully) and are using syringes filled with color-coded diamond paste, beware of the color staining the opal. I've switched to mixing my diamond compound (1200, 3000, and 14,000 grits) with a mixture of diamond powder and clear baby oil. It's even a bit cheaper, and it smells better. If you want it thicker, add a bit of Vaseline and stir well. Or for a different consistency, I've heard that melted beeswax or Crisco have worked well. I like to carve this material using a combination of diamond/metal bonded grinding points. Cratex points (coarse, medium fine, and extra-fine) for sanding and diamond compound on bullet shaped felt points—dry. When working dry, using these techniques, you won't have the color change problems associated with working wet. I've found that as long as I'm VERY careful with heat—checking the stone's temp often—this opal can be successfully cut dry. But it is heat sensitive, like other opals, so care must be taken when working without water.

Keep in mind this is just one of many cutting techniques that will accomplish the same result—a beautiful, well cut opal cabochon. The important things to remember are: cut slowly, avoid overheating your stones, smooth out flat areas, and polish your opals well—checking carefully for scratches.

Word Magic

by Karen Burns

ow many words of three letters or more can you sift from PALEONTOLOGY? Adding S to make a plural or D for past tense doesn't count. Answers are on page 29. Answers have been checked with *Webster's Seventh Collegiate Dictionary*.

Board of Director's Meeting Minutes

January 4, 2010 by Sarah Metsa HGMS Secretary

Х	President	Steve Blyskal		Beading Rep.	Sunday Bennett
	1 st Vice President	Ray Kizer	Х	Faceting Rep.	Gary Tober
х	2 nd Vice President	Beverly Mace	х	Lapidary Rep.	Phyllis George (sitting in unofficially)
Χ	Treasurer	Rodney Linehan		Mineral Rep.	Sigrid Stewart
Χ	Secretary	Sarah Metsa	Х	Paleontology Rep.	Terry Brawner
Χ	Past President	Terry Proctor	Х	Day Light Rep.	Nancy Fischer

The meeting was called to order at 7:40 p.m. due to waiting on the Secretary who was delayed by the weather.

Previous Month Board of Directors Meeting Minutes:

The minutes of the December 7, 2010 Board Meeting were published in the January 2011 BBG. Steve Blyskal noted an error. The December 7 minutes indicated that the Mineral Section would be paying the HGMS donation to the *Mineralogical Record* magazine for the next three years. This is incorrect. The Mineral Section has paid for the color pages depicting a mineral being highlighted in one of the *Mineralogical Record* magazine's regular columns for the upcoming two years. Prior to his passing away, Art Smith always donated that amount to the magazine every year in the name of the HGMS library to ensure that those photos were printed in color. This is based on an e-mail from Steve Blyskal as the correct information was not discussed at the Board meeting.

Treasurer's Report: Rodney Linehan reported that the club made approximately \$20,000 in 2010, and of that approximately \$18,000 was from the show. Final numbers will be available after a few final reimbursements and collected payments are accounted for.

Reports from Officers, Committees, and Section Representatives:

Show Committee: Theresa Peek, the Co-Show Committee Chair, reports that she has contacted all of last year's chairs to determine whether they wish to be chairs again this year. The Show Committee needs an Assistant Show Chair, a Publicity Chair, a Ticket Chair, and a Co-chair for Security as Al Lucas is currently working out-of-state. Rick Rexroad is this year's Dealer Chair. The first Show Committee meeting will be Tuesday, January 11. The quarter-page Show Flyer is designed and approved, and she is hoping to have it by January 20 in time for the Intergem show and the Tyler show.

Beading Section: Sunday Bennett has no current information about the Beading Section as she has been unable to contact Diane Sisson.

Daylight Section: Nancy Fischer will be presenting a travelogue on Guatemala for the

January program.

Mineral Section: Steve Blyskal advised that the Mineral Section will be electing a new Section Chair as he will be unable to act in that position due to being the new Club President. The Section's first January meeting will be a showing of about 45 minutes from a DVD about Tucson narrated by Dave Wilber and Bob Jones (Bob writes for *Rock & Gem* magazine). The Section's second January meeting will be a program given by new member Aaron Rever. Aaron is from Denver and is an expert on fluorescent minerals. He will be showing some examples from his own collection.

Paleontology Section: Neal Immega reported that the January speaker will be David Temple telling about the new Paleo Hall at the museum. Neal is the new Paleo Chair and Mike Dawkins is the new Field Trip Chairperson.

Faceting Section: Gary Tober advised he was unsure what program the Faceting Section has planned for January. It was confirmed that Patricia Hildbold is the Chair of the Faceting Section.

Lapidary Section: Phyllis George has been unable to attend a Lapidary meeting since September due to several surgeries, so she has no current information. Phyllis is willing to continue as the Lapidary Section Representative, but that will not be voted on until the January 17 Lapidary Section Meeting.

Youth Section: Beverly Mace predicts that the Youth Section will be working in the shop area during every meeting because they are very interested in this activity.

Archeology Group: Terry Proctor reports that they will be electing their Chairpersons at the January meeting. For the program, Sunday and Rusty Bennett will have a presentation about new Bronze Age discoveries in Bodmin Moor in Cornwall by Time Team. They are also working on a field trip in April to Vinton to attend a Flint Knapper convention.

Communications Director Report: Phyllis George is in the process of updating the list of Officers and Section Chairs on the Web site. She is also preparing the entries for the SCFMS Bulletin Editors' Contest. Finally, she has all the certificates and plaques that the club earned in 2010, and these will be officially presented during the January General Meeting.

Education report: Brian Honsinger was not in attendance, so no information was available about education programs.

Quartermaster report: Sarah Metsa reports that an inventory list and a refill of sundry supplies will be brought to the clubhouse the second or third weekend of January. Steve will be purchasing a new coffeemaker for the clubhouse.

Old Business:

Roof: Steve Blyskal will be contacting an independent auditor to determine the roof's sufficiency and potential needs.

Awning Light: Neal Immega will look for a solar-powered, motion-activated light to

install.

Door and Lock: Steve Blyskal will determine whether the door warrants a locksmith's repairs for sticking and will contact one if this is so. Terry Proctor will provide Steve with the information about the business park board so that Steve can contact them and determine the proper paint color needed to paint the door.

General Meeting: Arranging to have a Board member bring the refreshments to the General Meeting and having attendees "feed the saber tooth kitty" is working out very well. As such, this method will be continued in January with Sarah Metsa bringing the refreshment.

Fundraising for the Outreach Program and Grants: Terry Proctor would like to focus on a letter-writing campaign to raise awareness and funds for the Outreach Program. Sarah Metsa would like access to the club's membership in TANO in order to research grant opportunities for which she could apply. Terry Proctor moved to allow said activity. Nancy Fischer seconded, and it carried unanimously.

New Business:

Christmas Party: There was a good turnout for the party again this year. Rodney Linehan reported that the auction generated \$1, 673.00 in funds. There was one reported instance that a piece of machinery which Terry Proctor bought at auction went missing during the party.

Metalworking Classroom repairs and Accident Prevention: Discussion of various options regarding the repair of the middle classroom determined that rather than repair the classroom to its former state, some improvements should be made at this time. Terry Proctor moved to make the ceiling into a load-bearing ceiling with a Class 1 Fire Safety Rating and a blowout section. This would make the space above the shop available for storage. The cost should be under \$2,000, and the funds will be available from the Shop's account. This motion was seconded by Gary Tober, and it carried unanimously.

Also discussed was the topic of the explosion itself. It was determined that while this was probably an anomalous situation, refilling butane torches should be done outside of the shops and clubhouse.

Emergency Contact List: In light of the recent explosion at the shop, it was proposed that a list of emergency contacts and procedures be posted about the clubhouse. Sarah Metsa will be drafting and posting the list before the end of the month.

Standing on chairs: There was discussion about the fact that the club's folding chairs have been used as "step stools" in the past. Standing on them damages them to the point where they are useless as a chair. Matt Dillon purchased a 2-step stepstool for the clubhouse, and that should be used instead of chairs.

Mentoring: Steve Blyskal reports that he would like to support a mentoring program as a presidential objective. He is open to personally being a mentor to individuals interested in the Mineral Section. He will further address this topic in the next BBG.

HGMS checking account signers need to be updated: Rodney Linehan advises that with Steve Blyskal as the new president, it is necessary to change the signers on the club's checking account. Terry Proctor moved to have Sarah Metsa, as secretary, write a letter advising the bank to remove Terry Proctor and to add Steve Blyskal. Gary Tober seconded the motion, and it carried unanimously.

Meetup Group: Theresa Peek advises there is an HGMS Meetup group which is accessible at www.meetup.com. If Sections would like to have their programs or upcoming events listed on meetup.com, they should advise Theresa, Ray Kizer, or Steve Blyskal by Friday of the week before the event so that it can be posted to the site. Try to provide some specific information about the program and the presenter so that it will pique people's interest.

Adjourn: Nancy Fischer moved that the meeting adjourn, it was seconded by Terry Proctor, and it passed unanimously. The meeting adjourned at 9:50 p.m.

AFMS-Our Partner in Saving Our Public Lands

by Dick Pankey, President, ALAA from AFMS Newsletter 12/2010–1/2011

he Blue Ribbon Coalition just issued an eight-page "Insider Report." The main thrust of the BRC is to generate legislation and regulations that effect off-high way vehicle use, but most of the legislation and regulations that affect off-highway use and access also affects access and use by rockhounds and by the general public who use our public lands for recreation. The "Insider Report" listed the pending and proposed bills that would create more wilderness land and national monuments that greatly restrict our use and collecting rights. The BRC is concerned there will be a "lame duck" Congressional session and that these bills will be rolled into another all-ornothing omnibus bill rather than each bill being considered on its own merits. Their call to action is for all concerned citizen to contact their senators and representatives to oppose this ill-conceived legislative tactic.

The current administration is pushing two public lands initiatives: "The Treasured Landscape Initiative" and "The America's Great Outdoors Initiative." The "Treasured Landscape Initiative" includes plans for new Wilderness areas, expansion of National Parks, and the addition of 14 National Monuments across nine states affecting over 35 million acres. A leaked document proposes the abandonment of the BLM public lands management principles of Multiple Use and Sustained Yield. The new agency's new management guidance will be about "ecosystem-service value of BLM land" and makes no reference to recreation or multiple use.

The "America's Great Outdoors Initiative" has three components: outreach, coordination, and reports. Outreach is primarily about pushing a legislative agenda. It has already been used to push several Wilderness bills. The second goal directs EPA, CEQ, and the Departments of Agriculture and Interior to "identify existing resources and align policies and programs to achieve goals."

The U.S. Forest Service is beginning the process of revising how the agency prepares Forest Plans known as Planning Rules. These rules will guide management plans for 155 national forests and 20 grasslands. We are still waiting for the draft proposal.

The way to affect the future use of our public lands is to become informed and to get involved. Write letters and e-mails to your elected representatives; attend meetings and become involved in the legislative and regulatory process. Would you like to be more informed about these issues and become more involved? Please contact me for details and more information.

The Blue Ribbon Coalition (BRC) has a great and informative Web site www.sharetrails.org. This site is easy to read and easy to use and navigate. The BRC magazine is available online as are the Alerts and the Insider Reports. You can sign up to receive all Alerts directly to your e-mail inbox. The main thrust of the BRC is for Off Highway Vehicle users, but what affects them also directly affects us rockhounds and all people who recreate and use our public lands.

And while you are at it, be sure to check out the American Lands Access Association Web site—<www.amlands.org>. You'll find an enrollment form there plus updated information about various legislative proposals.

Become a member! Be an involved member!

AFMS Convention News

by Cathy Patterson, Convention Chair from AFMS Newsletter 12/2010–1/2011 AFMS / EFMLS Convention "Gems Along the Erie Canal" Syracuse, New York July 7–10, 2011 Hosted by the Gem & Mineral Society of Syracuse

s I write this, it's November and we're expecting our first light dusting of snow. It seems worlds away from the warmth of July and fun in sunny Syracuse, where a great show and convention await you July 7–10, 2010. Central New York is a neat area that I bet many of you may have never visited. So we encourage you to build in some extra days to maximize what this area has in store. There are a good number of Herkimer "diamond" dig sites nearby. Look for the next installment in the AFMS Newsletter in February. The various registration forms will be available via the AFMS Web site early next year, and there is a wealth of information available on the Web by doing a web search for "Syracuse."

First, a reminder about making reservations for the host hotel—the Ramada Inn, Buckley Rd. You cannot use the national 1-800 number to get the special room rate. Instead, call **315-457-8670** and tell them you want a room for the AFMS/EFMLS Federation Convention. The rate will be \$99 (plus taxes) which includes a full, hot breakfast daily and a FREE breakfast Sunday morning for the BEAC "Breakfast with the Editors and

Webmasters." This is an ideal deal! There are many other hotel choices within the area in all price ranges, and camping is available on the fairgrounds. A list of additional hotel/motels will be available via the AFMS Web site early next year.

With all our Syracuse club has to do to make this event come off the way you expect us to, we have no choice but to rely on you all for exhibit cases. Make this your year to shine. Easterners, you need to let the whole world see your good stuff in the light of day. Our target is 100 cases, which is huge for the East. With everybody's help we can do it. Think of it as, "If you don't do it; it won't get done." Competitive exhibit forms will be online soon. We are planning some interesting field trips for those sparkly Herkimers and the New York fossil the eurypterid.

Further north in the state there's a rich pegmatite area. In addition, for those not rock hounding, we have an interesting canal boat ride along the newly restored section of the Erie Canal. There's nothing like it in the US. We aim to please! Contact me if you wish.

Make plans now to meet your friends old and new in Syracuse. This will be a week to remember!

Cathy Patterson 315-638-8817 315-480-8908 <cathypatterson@verizon.net>

SCFMS—President's Message House Special

by Ike House, SCFMS President Greetings, Fellow Rockhounds,

recently received a letter (e-mail actually) from one of the regional Bulletin Editor Aids Chairmen asking if I would agree to judge the entries of their federation for the contest this year. As a former BEAC myself, I always appreciated my judges and agonized over whether some would decline each year when I asked if they would continue. Who would I get to replace him/her? Who should I ask? Who will say yes? Who will be "too busy"? I must admit, it is not a fun task and certainly is a chore for the askers.

I have served as a deacon at the church I've attended for many years. Two duties I have had over the years were Bible class coordinator and worship service coordinator. I had to ask, among other things, for volunteers to teach classes, offer public prayer, lead singing, and serve communion. Some folks were absolute joys to work with because they always said yes; some were reluctant to participate and always said no; some seemed like they always had an excuse to decline but would LOVE to help.

So what is the outcome of the matter? I agreed to judge of course! This will be the sixth straight year if I'm not mistaken. Far from being a chore, it is most pleasurable to

get a cup of hot coffee, sit down by the fireplace, and spend some time reading some great articles written by young people about a subject we all love. So, how 'bout you? Do you think you could read an article, newsletter, feature, or poem, evaluate and grade it, and write some comments about it? If so, you can be a judge! If you are asked, say YES! You might even want to make life easier for a kind-hearted soul who has agreed to serve as BEAC (often a thankless task) and volunteer before you are asked. I thank you in advance. :)

Don Shurtz has served admirably as the SCFMS BEAC for the last five years, and we are all in his debt for the time he has dedicated to the position. He has helped to develop several new concepts and ideas as well as spearheading the effort to establish and codify the Web site contest. Well done, Don, and many thanks from all the members of the SCFMS.

Finally, there are many other opportunities to serve in the federation. We have a nominating committee that is charged with finding folks who are willing to serve as elected officers. The president appoints other positions as well. As outgoing president, I have already volunteered to serve in another capacity and hopefully will be useful for many years to come. It won't take much time, and I know it will be appreciated. Wouldn't it be nice if all those who must find volunteers had a difficult time choosing among all those who asked to serve?

For all of those who are presently serving I say, "Don't stop"! For those who will be asked, I say, "Say yes"! For everyone else I say, "Volunteer"! You will find it more rewarding than you could ever imagine.

SCFMS Safety Report

by Owen Martin, SCFMS Safety Coordinator from SCFMS Newsletter 11–12/2010 Safer Field Trips and Knowing Where You Are! Contributed by Andrew Brodeur Connecticut Valley Mineral Club, Springfield, MA

verything we do has a certain amount of risk involved, and mineral collecting is no different. We are constantly going to remote places with rough unfamiliar terrain, and once you start getting comfortable with them is when the bad stuff can happen!

Complacency will get you in trouble every time, but with a little planning maybe you won't come back with more than a scrape and sore knees.

We go to some fairly remote places, and the more remote they are, the more you need to be thinking about the moves you are making and staying safe. No mineral specimen is worth an injury in the field! If you have never been to a particular location, you should always try and make your first trip there with somebody who's familiar with the site.

I think the most valuable thing you can know when you go out collecting is know where you are. Sounds funny doesn't it? How many times have you headed out on a field trip following the trip leader, and your only concern is not losing sight of his vehicle or the guy in front of you, you get to the location, and off you go. If something happened to you or another person and you needed help, could you tell a rescuer or emergency person where you are and how to get to you???

KNOW WHERE YOU ARE!!! Location, Street, and Town, three very simple and very important things that will allow help to get to you faster. If you are a GPS user, then you have that to use to your advantage also if needed. You should also notice some landmarks on your way in, as this will also help you tell people how to get to you.

When you dial 911 from a cell phone, it doesn't always go to the local police station. It may go to the closest State Police Barracks, and it may be in a different town. If you can't tell them how to get to you, you have just lost precious time, and you just added being lost to the problem, and your rescuers have to try and figure out where you are and get you out too!

If you need help, you need to know what to tell the people, what is your emergency?? The type of injury, what is being done for them in the field, how far in the woods—adult, child, male, female—HOW BIG ARE THEY??

These are all important things for the rescuers to know. Getting somebody out of a rough remote location isn't just a two-man job. In fact it could take a dozen or more rescuers to get one person out of a bad situation. If you don't have a cell connection, and you need to send another person for help, they will have to know all of the forementioned things to get help and to lead them back to the location to help the injured person. If you can send two people on this mission, it's better just in case something happens to one of them. They should try to get to the car as fast as possible WITHOUT getting hurt in the process.

Try to make a mental note of the closest house or store as you drive in to the site just in case you need to go for help and a phone.

If you have the option of staying with the injured person and calling or sending another person for help, you should do just that. Don't try getting the injured person and all your gear out of the woods and drive them to a hospital yourself. It wastes precious time; it could make matters worse, and delay the injured person receiving the critical care they may need. LEAVE IT TO THE PROS!

If you are collecting either alone or in a group, there is some information that should be shared before you go out. If you are going out alone or in a group, tell people where you are going and what time you plan on being back. If you are more than an hour overdue, the people you told should be making a phone call to the local or state police so they can see if your vehicle is still where you planned to go.

If you are leading a group, you should know who is a diabetic or allergic to bees—just in case there is a problem—and do they carry their meds with them? Is there anybody

with you that has a first aid kit or any medical training?

Don't take unnecessary chances. Look up before you settle down to do any collecting. Are you sitting under a hanging dead branch or tree? Use your head and eyes, and be aware of your surroundings. Know where you are and what's around you.

Don't be hesitant to tell the person near you if he or she is in a bad spot—you may see something they don't. With just a little knowledge and planning, you can make your collecting trips much safer for yourself and others in your group. Nothing can put a damper on a great day faster than an injury or incident that might have been preventable.

Have fun, be safe, and come to the next meeting with a good story about your collecting trip.

I'm Gonna Clean This Specimen

by Mel Albright AFMS Safety Chair

from AMFS Newsletter 03/1999 via The Sooner Rockologist 09/2010

ike many rockhounds, I have some mineral samples. Like many rockhounds, the samples need cleaning up. Ugly stuff is on the surfaces of the pretty stuff. Like many rockhounds, my first thought is "I'll soak it in some acid." Like many rockhounds, I may be headed for trouble.

First, the perennial warning: AAA—always add acid. If you are going to-dilute acid with water, always add the acid to the water. Why? The heat of solution of acid in water is high. If you add water to acid, it turns to steam and blows acid into the air. Very bad if your hand is still over the acid. Even worse if your head is, also.

Now—about cleaning up. The list of possible acids contains some that YOU AND I should NEVER get near. Hydrofluoric acid (HF) cleans fluorite. BUT, it is so dangerous that we should never consider using it. To quote from the Material Safety Data Sheet (MSDS) for HF: "Vapors may be irritating to skin, eyes, nose, and throat. Inhalation of vapors may cause irritation or burns of the respiratory system, pulmonary edema, or lung inflammation. Liquid and vapor cause severe burns that may not be immediately painful or visible. Substance is readily absorbed through the skin, penetrating the skin to attack underlying tissues and bone, Ingestion may cause severe burns to the mouth, throat, and stomach. HF may have adverse effects on kidney function, and may be fatal. The MSDS goes on for some time. What the above does not say is all those bad things occur with VERY low exposures. Convinced? It is NOT something for amateurs to be around. It is something professionals treat with much protective equipment, safety hoods, training, and care, and only when required.

Hydrochloric acid (muriatic acid) (swimming pool acid) (HCI) can be used for cleaning. Because it is so common, many people consider it as not too dangerous. WRONG! The HCI MSDS says: "Inhalation of vapors may cause pulmonary edema, circulatory

system collapse, damage to upper respiratory system, collapse. Touching it is even worse. With eye goggles and rubber gloves, you can use this material. But you must be very careful with it.

Nitric acid ($\mathrm{HNO_3}$) is sometimes considered for cleaning since many nitrates are soluble in water. Trouble is that nitric acid is a strong oxidizer. That means it reacts strongly with all organic material like people. It is also extremely corrosive. Contact with skin or eyes may cause permanent damage. The vapors can be dangerous, too. Most important—it is so reactive that it may well boil when you pour it onto your specimen to be cleaned. Use goggles and rubber gloves if you do try to use this stuff.

Sulfuric acid (H₂SO₄) is also available for use. Vapors can cause severe irritation of the respiratory system. Liquid can cause severe burns to the skin and eyes. Ingestion may be fatal.

Now a couple of more benign materials. Acetic acid (vinegar) can be used to clean specimens. It is dangerous when in strong solution—corrosive, and can cause serious burns. In the form we get it from the grocery, it is safe, but still corrosive.

Oxalic acid is often used to remove iron stains from quartz. Again we often underestimate its danger because it is common. Contact with the skin or eyes may cause severe irritation or burns. Ingestion may be fatal.

In summary -DO NOT USE ANY ACID unless you are trained to do so. If you do, use protective gloves, eye protection, have good ventilation, and remember—AAA—and even that use may generate heat and cause rapid and immediate boiling.

References: Applicable MSDSs

What Do They Mean By a "Petrified" Forest?

from the Mineral Memo, others, via Glacial Drifter 08/1988

etrified originally meant turned to stone—and this actually happened to certain ancient forests. The famous Petrified Forest of Arizona is a picture-book desert, painted with rainbow rocks under the enormous dome of a dazzling blue sky. The scene has been this way for several million years. But to a trained eye, the place is strewn with evidence that the region was very different in the dim distant past.

You may bash into a bit of this evidence. Suppose you saw what seems to be a branch or fallen log, lying right there on the ground among the colorful desert stones. If you happened to kick the woody object, you would regret it.

When the agony subsided, you would be ready to learn that the object is a petrified piece of wood made of super-hard stone. Simply stated, you innocently used your kicking muscles to bash your toe on one of the hardest chunks of stone in the Earth's crust. The story goes back at least 150 million years, when forests of living trees thrived in this area. Later a change in climate robbed the region of its moisture, and the magnificent forest trees became a desert region of arid sands. Some fell into old riverbeds and forsaken waterways. In time, desert winds piled desert sands above and around the fallen forest giants. The rocky, bone-hard ground was short of oxygen. Decay bacteria

need this vital element to live and perform their demolition duties on discarded organic materials. The fallen trees neither rotted nor decayed. Meantime through millions of years, scanty desert showers percolated down through the surface and accumulated pockets of ground water. In time, it dissolved loads of assorted silicates from the sandy minerals.

The ground water also percolated through the old fallen trees. Patiently, very patiently, their organic chemicals were gently, *very* gently washed away. The real miracle occurred as the woody substances were replaced by super-hard silicate chemicals left by the lazy mineral-rich ground water. Gradually, these mineral deposits replaced the woody tissue, copying the original cells and tree rings, molecule by molecule.

In time, the woody remains of the ancient forest were turned to stone, which is the original meaning of the word "petrified." The copy was made with age-old patience in finest detail. The quality materials used were molecules of semi-precious silicates, including rainbow colored quartz and opal, jasper, and flower-tinted agates.

The Rock Auction

by Julie Whitlatch Cedar Valley Rocks and Minerals Society

An auction is such a great money earner, But who would have known what a fat burner.

My back aches, my eyes are crossing, Boy, am I glad we're done with washing.

"Let's" lift and tote, and cart, and carry When this is over we'll all be merry.

I bid one you bid two, that rock is such a pretty blue.

Gems and minerals, jewelry, tools, on and on like bidding fools.

The sale is over, and was quite fun, I'm glad the hardest work is done.

Both the buyers and sellers are happy, But I could really use a nappy.

Let's all shout hip, hip, hooray, Scholarships again we'll pay.

I hope we wait a year and a day. Before we auction again this way.

Wandering North Magnetic Pole (where is it now???)

from Science Digest 11/85,. others, via Glacial Drifter 10/95 and The Roadrunner 11/2010

ince 1904, the north magnetic pole has shifted 480 miles to the northwest. This is 800 miles south of the true North Pole.

The earth's magnetic poles are continuously migrating over the polar regions of the planet. For the benefit of navigators, it is necessary to track them down from time to time. The location of the North Pole was recently reported by Canadian geophysicists, who say its new site falls pretty much along its expected path of travel.

According to Larry Newitt of the Dept. of Energy Mines and Resources in Ottawa, the North Pole has journeyed northwest 800 km since 1904. Geophysicists attribute this long-term migration to the complex motion of the earth's fluid core. Superimposed on this pattern is an erratic jig—in which the pole can wander by as much as 80 km in one day—induced by the movement of charged particles that get trapped by the geomagnetic field in the upper atmosphere.

The average position of the pole measured in May 1984 was 77 degrees north and 102.3 degrees west. In 1973, the last time the scientists had looked at it, the pole was at 76 degrees north and 100.6 degrees west.



Word Magic Answers:

Aegis, again, age, ale, all, alto, ant, ate, atone, eat, east, eating, gain, gale, gall, gist, glean, gloat, goal, goon, goop, igloo, into, lain, lane, last, late, Latin, lean, leap, leapt, least, leer, lien, line, lit, loan, log, loge, logo, lone, loop, loose, loot, lop, lose, nail, neat, noise, none, not, ogle, oil, oleo, olio, opal, onto, page, pail, pain, paint, pale, pal, pale, pallet, pain, pan ,pane, pastel pant, past, paste, pat, patent, pate, patient, pine, pinto, plane, planet, plant, pen, penal , pest, pet, pill, pig, pile, pilot, pin, pit, pistol, poise, pole, pool, sail, sag, sage, sang, slain, sale, saloon, sap, sate, seat, sign, sin, sing, singe, single, slate, sleep, slept, slit, sloop, snail, snit, snoop, soil, sole, song, soon, span, spit, spite, split, slop, slope, spine, spline, soap, son, sop, spoil, spool, spoon, spoor, spot, stain, stall, stallion, state, stoat, stone, stool, stout, tail, tall, teat, tin, tine, tip, tone, tong, tool, toot, tot, total, tote

Show Time 2011

February 26-27	Pasadena, TX	Clear Lake Gem & Mineral ISociety Pasadena Convention Center 7902 Fairmont Parkway Al Pennington gapenning@earthlink.net www.clgms.org
March 5-6	Big Spring, TX	Big Spring Prospectors Club Howard County Fair Barn Jerald Wilson (432) 263-4662 Lola Lamb (432) 263-3340
March 19-20	San Antonio, TX	San Antonio Gem & Mineral Society LIve Oak Civic Center, 8101 Pat Booker Rd. krbotx@gvt.c.com; swgemandmineral.org
April 1-3	Macomb, Illinois	National Fossil Exposition XXXIII Western Hall, Western Illinois University Tom Williams, Paleotom234@dishmail.net Steve Holley, Ilfossil@hotmail.com www.midamericapaleo.org
April 15-17	Alpine, TX	SCFMS/Chihuahuan Desert Gem & Min. Club Alpine Civic Center, Hwy. 90 W & 13th St. N Mary Brogan, (432) 386-2340 marybrogan@rocketmail.com; www.cdgmc.org
April 16-17	Waco, TX	Waco Gem & Mineral Club Texas State Technical College Industrial Tech. Bldg., Crest Dr., off I-35 North of Waco
July 7-10	Syracuse, NY	AFMS/EFMLS Federation Show Gem & Mineral Society of Syracuse New York State Fairgrounds Center of Progress Bldg. cathypatterson@verizon.net; www.gmss.us
October 13-15	Mount Ida, AR	25th Annual Quartz Crystal Digging Contest Montgomery County Fairgrounds Maureen Walther, Mt. Ida Ch. of Commerce 870 867-2723; www.mountidachamber.com director@mountidachamber.com
November 11-13	Humble, TX	Humble Civic Center, 8233 Will Clayton Pkwy. 5 miles east of Bush Intercontinental Airport 1 mile east of Hwy. 59; www.hgms.org Chris&Theresa Peek; ladyt682@hotmail.com

2011			Febr	2011		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 7:30 Board Meeting	2 7:30 Mineral Section 10-5 Shop Open	3 7:30 Archaeology Group	4	5 10–5 Shop Open 10–12 Youth Section
6	7	8 7:30 Show Committee	9 7:30 Faceting Section 10-5 Shop Open	10	11	12 10–5 Shop Open
13	14 1:00 Day Light Section Valentine's Day	15 7:30 Paleo Section	16 7:30 Mineral Section 10-5 Shop Open	17	18	19 10–5 Shop Open 10-12 Youth Section 1:30 Beading Section
20	21 7:30 Lapidary Section	22 7:30 General Meeting	23 10-5 Shop Open	24	25	26 10–5 Shop Open
27	28					i

2011			Mar	2011		
Sun	Mon	Tue	Wed	Thu	Fri	Sat
		1 7:30 Board Meeting	2 7:30 Mineral Section 10-5 Shop Open	3 7:30 Archaeology Group	4	5 10–5 Shop Open 10–12 Youth Section
6	7	8 7:30 Show Committee	9 7:30 Faceting Section 10-5 Shop Open	10	11	12 10–5 Shop Open
13 Daylight Saving Begins	14 1:00 Day Light Section	15 7:30 Paleo Section	16 7:30 Mineral Section 10-5 Shop Open	17 St. Patrick's Day	18	19 10–5 Shop Open 10-12 Youth Section 1:30 Beading Section
20	21 7:30 Lapidary Section	22 7:30 General Meeting	23 10-5 Shop Open	24	25	26 10-5 Shop Open
27	28	29	30 10-5 Shop Open	31		

The BACKBENDER'S

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1998 - 1st (Large) 2000 - 1st (Large) 2003 - 1st (Large) 2005 - 1st (Large) 2006 - 1st (Large) 2007 - 1st (Large) 2008 - 1st (Large) 2009 - 1st (Large) 2010 - 1st (Large)

Rallelin Roar

(998 - 2nd (Large)

AFMS

2004 - 3rd (Large) 2007 - 1st (Large) 2010 - 2nd (Large)

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