ROCK-N-ROSE

NEWSLETTER OF THE EAST TEXAS GEM & MINERAL SOCIETY

PAGE 1 VOLUME 37 TYLER, TEXAS ISSUE 11 NOVEMBER 2011

Coming Shows, 2011

Dec. 03 - 04
ROUND ROCK, TX
Paleo. Soc. of Austin
Old Settlers Park
Next to Dell Diamond

Dec. 10 - 11
DE RIDDER, LA
De Ridder G&MS
Beauregard Parish
Fairgrounds

Dec. 10-11
STAFFORD, TX
Houston Bead Market
The Stafford Centre
10505 Cash Rd.

Don't forget the goodies!

INSIDE THIS ISSUE

VICE-PRESIDENT'S MESSAGE

We had a great meeting last night, despite homemade door prize drawing tickets and the absence of our fearless leader, Pres. Rip. The group discussed the election of new officers to be held in December. After the dust settled, Don Campbell has agreed to fill the office of President for the next year, Becky Whisenant has agreed to once again be Vice, Jeri Kitchens will, thankfully (!) commit to being Treasurer, which leaves two vacancies: Secretary and Field Trip Chairman. (Yes, Keith, we're assuming you will continue as Show Chair.) All volunteers are welcome. Just come to the December meeting and put your name in the pot.

Richard Armstrong's presentation on Gemology software was very informative. We really appreciate members who share their particular expertise with us and who take the time to contribute to the education of the whole group.

Be sure to make note of upcoming field trips this month and in February and let us know if you have an idea. The winter months and early spring can be an excellent time for field trips. Also, beginning at next meeting, we will begin signing up to work at our annual Gem & Mineral Show to be held in January. There's something for everyone to do! See you in December and remember to bring a gift for the annual gift exchange!

Happy Trails and don't forget to give a kid a rock.

Becky Whisenant, Vice President

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By now we've probably said goodbye to 100-plus weather for this year. That means if that's all that was keeping you away from rocks in the wild, it's time to go! And bring a kid with you...

From the President's Message in the 11/11 Gritty Greetings.

OCTOBER MEETING MINUTES

The meeting was called to order by Vice President Becky Whisenant @ 6:50pm, who is filling in for Rip Criss who was unable to attend.
Twenty-one members, and no guests were present; Becky made a motion on the floor to accept the minutes as read. Jack Shull made the motion to accept, Susan seconded, and it voted unanimously. Jeri Kitchens, Treasurer was unavailable, but Don Campbell indicated that there were a couple of deposits made; one significant was the club auction last month that netted $685.00.
A member (name was not given) will be at Kissimmee school to do a presentation on November 11, 2011.
The field trip that is being led by Don Campbell will be to Lake Nacogdoches November 19, meeting at the Dairy Queen in Alto (Hwy 69) at 9am.
Don has also extended an invitation to include the East Texas Master Naturalists. Details and handouts were readily available, along with Dons' cell number.
Laura Wilson has requested that the field trip she has scheduled for February 3, 2012, to Mason Texas be deferred until February 18, 2012, as she and her husband will be out of the country.
Pete Keiser made mention of Johnson's Rock Shop out of Livingston, and the amount of petrified wood that Mr. Johnson has just on his property.
It's that time of year again, to elect officers. If you weren't there, you may have been added to the ballot by default! Please attend the December 5th meeting; besides installing the new 2012 officers, we will be having our Chinese gift exchange, and potluck dinner. The Chinese gift exchange is a wrapped or bagged gift of rock, mineral, book, jewelry, art, rock tumbler, saw…….ok, ok, you get it! LOL
Remember pot luck……food…..…desserts…….food…….That is the best part of the holiday season, don't you think?
Drawings for the door prizes, lots of specimens, I think Linda, and Susan O kept getting them to where they were re-donating them back. Time to go to the boats……
Our program tonight was by Richard Armstrong, who did a presentation on the Gem Pro Software. He indicated you could upload it for $49.99, or purchase the CD for $59.99. The software explained the type of grading, cyclical properties, and hardness on the gemology of specific but broad precious and semi precious stones. @ 8:15 pm the presentation ended with Q & A. A very interesting and informative meeting. We thank you very much Richard!!!
Meeting ended @ 8:37pm.
Respectively submitted, by a substitute…
Laura Wilson

DECEMBER 5TH MEETING PROGRAM

The December 5th club meeting will be our annual Christmas gift exchange party. We are asking everyone to bring one gift wrapped rock, mineral specimen, fossil, or earth science related item to the meeting. We will do a Chinese gift exchange where we draw gifts and take away from each other. The gift can be anything earth science related, rocks, minerals, fossils, gemstones, jewelry, hobby tools, books, etc.

Also, everyone please bring your favorite holiday treat to the meeting to share with everyone. We like to have lots of good food and snacks at this meeting. If your food needs bowls and plastic ware or special serving utensils, please bring these. We will have the usual plates and cups on hand.

SPECIFIC GRAVITY

Specific gravity of a solid substance is its weight in air compared with the weight of an equal volume of water. Specific gravity of a mineral is constant and does not change providing its composition does not change. There are six different types of balance used to determine specific gravity:

1) Jolly balance,
2) Kraus improved Jolly balance,
3) Berman density scale,
4) Westphal scale,
5) Chemical balance,
6) Pycnometer, also known as a specific gravity flash.

Relative density is harder to explain, so I will use an example. Say you have two doors, one wood and one of iron. Properties are all relative to the mass. This means that the iron door has a greater mass for the same bulk than the wooden door, making the density of the iron door harder to move.

Taste belongs only to those few minerals which dissolve somewhat in water. The terms are easily understood, and there are seven of those terms:.

1) Saline - salty,
2) Alkaline - soda or potash,
3) Bitter - Epsom salts,
4) Acid - sour like acids,
5) Astringent - alum,
6) Pungent - ammonium chloride,
7) Cooling - potassium or sodium nitrate.

Odor also belongs to a few minerals, when they are breathed upon, rubbed, scratched, pounded, or heated. There are seven types of descriptive odors:

1) Argillaceous - clay-like - Kaolin,
2) Bituminous - like bitumen or organic matter - Asphalt,
3) Fetid - odor of rotten eggs - Bituminous limestone,
4) Astringent - like alum,
5) Pungent - ammonium chloride,
6) Cooling - like potassium or sodium nitrate,
7) Garlic odor given off by some arsenic minerals when heated - Arsenopyrite.

Josie Middleton From The Stone Chipper 04/96; via Stoney Statements 4/10

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A Rock Collection

It has been said that one who has a rock collection must have:
A house big enough to hold it,
A soul big enough to appreciate it,
A heart big enough to share it,
A head big enough to hold the surplus.
from SCFMS Newsletter, July-August 1981, reprinted Sept.-Oct. 2011

GEODES

Geodes are the mysterious treasure-boxes of the geological world. Undistinguished lumpy balls of rock from the outside, they often reveal crystal-lined interiors when cut or broken open. The crystals are most often clear quartz, although they are sometimes amethyst or calcite. Rarely, crystals of pyrite, sphalerite, and other minerals may also be found. Geodes may be less than an inch in diameter, though some, like the Brazilian amethyst cathedrals, can be several feet across. But some geodes, commonly referred to as duds, are empty. Others are solid crystal, or nearly so; these are called nodules.

There's no way of telling what you will find in a particular geode from looking at the outside, although nodules are noticeably heavier than hollow geodes. Geologists don't agree on the exact processes involved in the formation of geodes. Given that geodes form in both volcanic and sedimentary rocks under very different conditions, the subject is a complex one. But the most common theory is that geodes form inside already existing hollows within the rock. In the case of volcanic rock these hollows are the result of gas bubbles in the molten flow. Cavities in sedimentary rock may be the result of concretions, of an expansion in the rock due to internal fluid pressure, or of the dissolving out of earlier material by groundwater–or any combination of these causes. Groundwater laden with silica and other minerals fills these hollows. Over hundreds to thousands of years minerals precipitate out of the water, leaving a silica gel on the interior walls of the cavity that hardens into rock as it dries.

The first layer is usually chalcedony, a strong, crypto-crystalline form of quartz. As this process of mineral precipitation reoccurs over and over, later layers form distinct, inwardly pointing crystals. Geodes that are empty missed these later cycles. When a number of geodes are found together in a layer of rock, often it's the ones at the top–ones that were often above the level of the groundwater–that are duds. A similar process of mineral precipitation can create crystal-lines cavities called vugs. The difference between one of these cavities and a geode is that the outer layer of a vug is not durable enough to survive weathering, so it disintegrates when exposed rather than forming a ball or rock with a crystalline mystery at its heart.
From Rollin' Rock 6/11 via Rock Rattler 4/07;via Stoney Statements 10/11

FROM MY NOTEBOOK
by Mary Trammell, Past President, SCFMS

SOME USES OF LIMESTONE AND SANDSTONE

Working in genealogy, I found a problem trying to read tombstones. Many old stones have worn away due to time and weather. Even trying to take paper and rubbing the paper to make an imprint is not effective in some cases. I began to think about the kind of rocks that make durable headstones.
First a bit of clarification: marble begins as limestone, has been metamorphosed by heat or pressure into a more dense and thus a more durable stone. As for sandstone durability, it depends on what was used to cement the sand grains together and upon the climate. Sandstones that are cemented by silica (quartz) are more durable than those cemented by calcium carbonate. Calcium carbonate is the main ingredient in limestone and chalk, even turns. Humid climates destroy the calcium carbonate sandstone or marble much faster than climates. Rainfall is naturally slightly acidic, and this more so by air pollution.
The sandstone granodiorite from Indiana formed with silica is the most durable of all, even more than granite. Granodiorite is shipped all over the world and is also used in buildings and carvings. One of the most beautiful carvings from limestone is from the Oolitic Limestone, which is a life size statue of "George Washington Crossing The Delaware". It was carved in the city of Bedford, Indiana, shipped to New Jersey and erected at the point where Washington crossed the Delaware. It took 5 or 6 train cars to ship it from Bedford.

(Editor's Note: The before mentioned carving, was carved for the 200th anniversary of the United States. My family was in Bedford, just a few days before it was shipped to NJ. A great work of art.)
Via SCFMS Sept./Oct. 2011 issue

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FIBER OPTIC GEMS: WHAT ARE THEY? by Bill Grimes

Fiber optics was developed as a result of someone studying a piece of the mineral ulexite. Also known as TV stone, it is a hard, brittle, fibrous stone which when writing is placed underneath, will allow the image to appear on the surface of the stone.
This led to the theory that if this type of fibrous material could be manufactured, it could be used in many different ways where image transmission is needed. Fiber optic cables were at first very slender and flexible, used in surgeries and in house-hold decorations.
The manufacturing technology improved and soon manufacturers were spinning out miles of cable for a new application - data transmission lines. These lines can be up to two inches across. The cable consists of thousands of pairs of optic fibers. Each pair carries data for phone, computer, fax, etc. Since the sides of the cable are reflective, there is no need for insulation or shielding around each fiber, as in old phone lines. This translates to more pairs in a smaller space. For us in the hobby, this created one of the newest gem treasures - fiber optic cabs. In order to make a fiber optic cabochon, the cable scraps are first cut into small lengths.

Continued from page 5.

Either the cable is then cut into spheres, or it is sectioned parallel to the length of the fiber. Once the slices are made, it is cut much like any other gem. Care must be taken however, to protect the ends of the cable from splintering, or catching cutting dirt, abrasives, etc.
There is an interesting thing about fiber optic gems. If you look at them from a 90 degree angle from the eye of the gem, the gem will be transparent to light, maintaining its properties for light transmission.
from Glacial Drifter 6/02 via GEM CUTTERS NEWS 5/2001Rockhound Roundup, 5/99, via Stoney Statements 05/10

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Helpful Hints! (they never hurt)

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

· To repair a spread apart link in a small broken chain, insert a toothpick in the two adjacent links. The faulty link is thus held in place for pliers to pinch it together again.

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

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

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

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

· Did you know that malachite is very poisonous in its raw state? Never lick the material to see the color. Don't even repeatedly lick your finger and apply. When you grind, wipe the contaminated oil off your skin right away. If you smoke and the taste becomes very sweet you are absorbing the malachite dust. The copper oxide dust is mixing with the moisture in your mouth and reacting to the tar in the tobacco, turning it into saccharine. Needless to say, you should take some immediate steps to stop the Inhalation.

via Ft Collins' Lodestone 2/11, via Rockhound Gazetter 4/11, via Beehive Buzzer 4/11, via Quarry Quip July 2011 via Greater Cincinnati Lapidary and Mineral Society, 9/11; via Stoney Statements 09/11

BENCH TIPS BY BRAD SMITH
Some printed before, but still very useful

Some of you who do jewelry might be interested in a video tutorial about how to make a tube setting. It's at http://design.kcjewelbox.com/2011/10/12/tool-time-tuesday---tube-setting-tutorial.aspx>

HOMEMADE WAX TOOLS
Save your used X-Acto or scalpel blades for utility work on the bench. They're wonderful for delicate wax work. Use a cutoff blade or a grinding wheel to shape the blades to what you need. For instance, you can carve away excess metal on the spine to make yourself some narrow carving knives that do a great job of detailing small areas of your waxes.

RING SIZE VARIATIONS
The numerical sizes marked on ring gauges and ring mandrels are often not the same across different manufacturers. If you're using a ring gauge to measure a customer, be sure to compare the markings on the gauge with the markings on the mandrel you use to make the ring. They may not be the same.
Also, you may have to adjust a little for the width of the ring shank. If you're making a wide shank ring, the ring generally has to be a little bit larger in diameter than the ring gauge size in order to get a comfortable fit.

DEPTH GAUGE FOR DRILLING

Sometimes you need to drill a number of holes all to the same depth. One quick and easy way to do this is to wind some tape around the drill bit so that the tape just touches the part surface when the hole is deep enough.
You can do this either by measuring from the tip of the drill to the tape or by drilling one hole correctly, leaving the bit in the hole, and wrapping tape around the bit at the surface level.

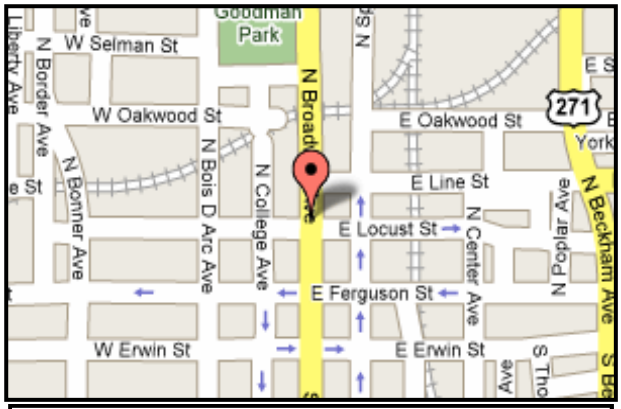
CUTTING A BOLT

Whenever you have to cut a threaded bolt shorter, it's always difficult to get the nut to thread back onto it. And the smaller the bolt, the more difficult this is. The problem is easily solved by screwing a nut onto the bolt before cutting it.
So here's how I do it. Screw a nut onto the bolt, grip the bolt by the piece to be sawed off, saw the bolt to the desired length, taper the end with sandpaper or file, and unscrew the nut from the bolt. Unscrewing the nut over the freshly cut end of the bolt straightens out any damage to the threads. Gripping the bolt by the piece to be sawed off localizes any crushing damage to the piece you're throwing away.

More BenchTips by Brad Smith are at: groups.yahoo.com/group/BenchTips/
or
facebook.com/BenchTips

CLUB OFFICERS

PRESIDENT:	**Robert (Rip) Criss** **P.O. Box 340** **Oakwood, TX 75855**	**903-922-2856**
VICE PRESIDENT	**Becky Whisenant** **3786 CR. 2107** **Rusk, Texas 75785**	**903-795-3652**
TREASURER:	**Jeri Kitchens** **2533 Chelsea Dr.** **Tyler, TX 75701**	**903-245-8822**
SECRETARY:	**Penny Hawkins** **134 CR 3151** **Jacksonville, Texas 75766**	**903-586-4463**
MEETING PROGRAM CHAIRMAN:	**Don Campbell** **3319 Omega Dr.** **Tyler, TX, 75701**	**903-566-6061**
FIELD TRIP CHAIRMAN:	**Your name could be HERE!!!** **Volunteer Today!**	
SHOW CHAIRMAN:	**Keith Harmon** **8316 Oxford ST.** **Tyler, TX 75703**	**903-581-4068**
CLUB ADDRESS:	**East Texas Gem & Mineral Society** **P. O. BOX 132532** **Tyler, TX 75713-2532**	



THE EAST TEXAS GEM AND MINERAL SOCIETY MEETS ON THE FIRST MONDAY OF EACH MONTH, UNLESS THAT DAY IS A HOLIDAY, THEN THE MEETING IS MOVED TO THE SECOND MONDAY. WE MEET AT THE DISCOVERY SCIENCE PLACE, 308 NORTH BROADWAY, JUST NORTH OF DOWNTOWN TYLER, TEXAS. MEETINGS BEGIN AT 6:45 P.M.

NOTE TO EDITORS

Feel free to use contents and graphics for non-profit newsletters. Give credit when and where due.

Purpose of the East Texas Gem & Mineral Society

Is to promote the study of geology, mineralogy, fossils and the lapidary arts.
The public is always invited to attend all club meetings.

Annual dues are $10.00 for adults and $2.50 for juniors.

Please send any info or articles to be included in the newsletter to the Editor by the 15th of the month. Please keep your address, phone and email information up-to-date, so that we can get the newsletter to you in a timely manner. Out-of-date information costs the club time and money in returned newsletters.

Thank you... SB

EDITOR: **Susan Burch**
20427 US. Hwy 69 S.
Alto, TX 75925

E-Mail: **rocknroseeditor@hotmail.com**
Phone: **936-615-5397**

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