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SLAB-GAB

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Member of: The South Central Federation of Mineral Societies &
The American Federation of Mineral Societies

Meetings—First Friday of Month
No meeting in July

P.O. Box 2804
Victoria, TX 77902

Purpose: To promote education and share our interest in the various earth sciences through the study of lapidary arts, mineralogy, and archaeology within the meaning of section 501 (c) (4) of the Internal Revenue Code of 1954 or the corresponding sections of future United States Internal Revenue Code.

The January meeting will be held Fri., January 6, at the Victoria Art League located at 905 S. Bridge, Victoria, TX. Fellowship-6:30, Competition Judging-6:45, Business Mtg.-7pm.

Hello VGMS Gems,

Happy New Year to you and your families!

With the new year I hope you all thoroughly enjoy the opportunities that I know will be available to us as rockhounds and earth science enthusiasts in 2012. I believe we, as a club, can cultivate some of those opportunities ourselves by continuing our efforts to be discoverers, learners, and teachers, whenever possible.

In our pursuit to be all of those things we need to think about where we are now and where we'd like to be; how we may grow. For your consideration I present the following.

1) Do we want to continue our search for a clubhouse or are we comfortable with utilizing various locations (i.e. club members homes, public gathering places or other facilities) in which to conduct workshops and club activities?
2) 2) Are we doing enough to education our membership and our community?
3) Do we present a feeling of enthusiasm and an environment that inspires engaging and dedicated membership?
4) 4) Should we be doing more to infuse interest in area youth to join and participate in club activities and therefore cultivate club growth and longevity of service?

Building on the "outreach" we've begun to develop by accepting requests to present programs or conduct talks at area schools will prove beneficial to us and our community. Perhaps *we* should take the more proactive position; we could do more reaching out to scouting groups, church youth groups, and science classes. It could be as simple as extending invitations to some of those groups to join us when we conduct weekend workshops. School and busy parent schedules often present insurmountable challenges when it comes to weeknight participation.

During a recent discussion I had with a school administrator, the suggestion was offered that our club would cultivate stronger relationships (and future membership) with area youths by presenting talks, programs or workshops that parallel the current curriculum offered in classrooms...but with the more fun, hands-on, sharing experiences we all find enriching.

Youth organizations and classes need not be the only groups we extend invitations to; there are no doubt some adult groups that would enjoy and be inspired by our skills, learning and fellowship.

I welcome your suggestions and shared experiences. Our club is comprised of some very talented, knowledgeable, and gifted members. Together we can get the rock rolling toward building our membership and optimally promoting the benefits of being a servant to our community through the Victoria Gem and Mineral Society.

Thank you,
Dave Winston Snell

Most Minerals Are Safe to Handle, A Few Require Real Caution

by Dr. Carl and Barbara Austin, Magic Valley Gem Club

From: *Magic Valley Gem News, 9/2010*(Honorable Mention – AFMS Original Adult Articles Advanced)

This brief article is written to expand on the information in the note by Terry Hicks in the May *Magic Valley Gem News* regarding the fact that some minerals require care when cutting, polishing or otherwise handling them.

To begin with, minerals are naturally-formed chemical compounds, and there are about 3,500 of them known today. They can range from very simple ones like diamond, which is crystalline carbon, to what are often referred to as kitchen sink minerals like ampangabeite, which has the formula $(Y,Er,U,Ca,Th)_2(Cb,Ta,Fe,Ti)_7O_{18}?]$. This is called a kitchen sink mineral because it has everything in it but the kitchen sink. As most of you know, we sold minerals at the gem and mineral show for a number of years, but there are some minerals we would never sell to the general public. These are minerals that are outright dangerous poisons like arsenolite, As_2O_3, and the radioactive minerals, many of which are truly beautiful, but many folks are very fearful of anything radioactive (although they never hesitate to buy a smoke detector with radio-isotopes for their house or a thorium-impregnated mantle for their gasoline camping lantern.)

Whether or not a mineral should be considered a health hazard depends on how much you plan to handle it and whether the minerals are accessible to little kids. Just about everyone is aware that lead-based paints are poisonous. These paints use ground up lead carbonates as the pigment. Lead carbonate is the mineral cerussite. This means that when out collecting minerals on the dump of an old lead mine you need to be aware that if the dump is somewhat rusty red, you can expect the powdery reddish dust to contain such lead oxide minerals as cerussite, plumbojarosite, and anglesite in considerable quantity. You should avoid breathing the dust you stir up and thoroughly wash your hands before eating lunch. In particular, when collecting minerals on the dump of a lead mine, you should never eat pickles at the same time because the vinegar in the pickles reacts with the lead minerals to make lead acetate, which is both poisonous and readily absorbed in the stomach. Toxicity occurs if you absorb over 1/120 grain of lead per day for several days, which means controlling the exposure of workers in oxide lead mines is a near impossible task. The lethal dose for lead is 7 ½ grains which is not very much cerussite.

The arsenic minerals most commonly found are the sulfides and sulfo-salts like arsenopyrite, realgar, orpiment, tennantite and enarite, and they are quite insoluble and considered safe to handle. The time one needs to be cautious is when the dumps of a mine with high arsenic values are oxidizing rapidly, even to the point of burning at times. This creates enough heat to form pretty white crystals of arsenolite on the surface and cooler parts of the dumps. Arsenolite, which is arsenic trioxide, is a deadly poison. The fatal dose is 120 milligrams. The brightly colored arsenates like erythrite, cobalt arsenate, and scorodite, iron arsenate, are pretty much insoluble and safe to handle as specimens.

The antimony sulfide, stibnite, is safe to handle and, when common cleanliness is observed, the antimony of oxides such as cevantite, stibiconite, and valentinite are also safe to handle as well but, if collecting these minerals underground one should avoid inhaling the dust stirred up when chiseling these minerals out of a vein or the walls of a stope. The fatal dose of ingested antimony oxides is around 100 to 200 milligrams. As always, collecting areas for antimony minerals are not good places for little kids, but the samples cleaned up and on the shelf on display are considered harmless.

The mercury sulfide minerals, like cinnabar and metacinnabar are quite insoluble and are safe to handle, including cutting and polishing if kept cold and wet while being worked. The gemstone myrickite is actually opal, colored by traces of cinnabar. This material can make some really pretty cabochons, and the original myrickite from Myrick Springs in California was sold as a gemstone by Tiffany many years ago. This locality is now inside a military weapons range and is inaccessible to the public.

The weathering products of cinnabar include oxychlorides like eglestonite and terlinguaite and the simple chloride calomel. When collecting and handling the mercury halide minerals, especially those found on dumps or in shallow mine workings, care should be taken to avoid inhaling much dust, and you should scrub your hands

thoroughly before eating. Native mercury is often present as gobs and blobs in mercury deposits and is often found filling vugs when cracking open vein samples at a mercury mine dump. The stuff makes pretty samples, but one should remember that while metallic mercury is harmless, even if you swallow it, the vapor is a serious poison. Native mercury samples should be kept in sealed bottles and not just set out loose on the shelf, especially if near a light bulb that will cause the sample to be heated and outgas rapidly.

The multitude of borate minerals present a poisoning hazard only if ingested in large amounts. Most of us are familiar with Boraxo, which is simply ground up borax, and you never see a skull and crossbones on the package. Borax is poisonous, but the lethal amount for an adult is somewhere between 5 and 15 grams. Little kids should not be allowed to play with borate minerals, but for an adult the collecting of borax or kernite, both of which are somewhat soluble, presents no hazard. Colemanite and ulexite, the latter called TV rock as it is an image projector when polished, are quite insoluble and hence harmless to handle, cut and polish. Howlite is a silico-borate often used to cut and polish for beautiful cabochons that people etch designs onto. It is very insoluble and also harmless to handle.

The silicates are all pretty much insoluble and hence safe to collect, cut, polish, throw at the neighbor's dog or what have you. Beryllium is a poisonous metal, but emerald, which is the mineral beryl, a beryllium silicate, is insoluble and quite safe to cut and polish or to wear as a gemstone. Bertrandite, another beryllium silicate, is also quite insoluble. As a piece of history, old time fluorescent light globes were incredibly dangerous if broken, because they used a beryllium-based phosphor that would cause cuts that would never heal. The most dangerous silicate in our mineral collection is uranophane, not because of its silica content but, because it has enough radium in it to be viciously radioactive. We do not keep it in the house.

Quartz and the quartz family of minerals can yield quartz dust when grinding or cutting dry, which after long-time exposure can cause permanent lung damage in the form of silicosis. To avoid inhalation one should wear a good dust mask AND avoid inhaling silica dust from your clothes and hair after you take your mask off AND avoid inhaling dust stirred up when you are cleaning up the equipment.

Terry Hicks mentioned asbestos, but collectors should know that there are many different asbestiform minerals, some more hazardous to your lungs than others. Tiger eye, which is crocidolite (actually riebeckite), a blue amphibole asbestos replaced by quartz, just has the usual concern over creating fine silica dust when cutting and grinding and polishing. This situation changes slightly when the tiger eye has blue patches that are patches of crocidolite that were not fully replaced by silica. Handling it is pretty much harmless as the crocidolite fibers stick together well, but if you plan to work with large amounts, you should use respiratory protection.

Chrysotile, the long fiber asbestos form of serpentine, is essentially harmless, though people tend to get hysterical about the stuff. The most dangerous of the asbestiform minerals is amosite, but again, unless you are grinding up the stuff in large lots, the hazard is negligible when just handling a few samples. Interestingly, amosite was used for the filters in one brand of cigarettes for a while. Not very smart.

The minerals you need to be cautious with are those that are soluble in water or that react with common food chemicals like vinegar. Many soluble minerals are actually harmless in modest quantities, but their dusts taste terrible. This is especially true of the alums and the iron sulfates. When collecting minerals like melanterite and halotrichite-- or goslarite (a zinc sulfate that forms beautiful, long, hairlike crystals in old zinc mine workings), if you do not wear a dust mask you will be spitting for some time what tastes like the old fashioned ink used in school back in the days of straight pens.

Brightly colored minerals, like the copper carbonates malachite and azurite are no more hazardous than the copper pipes in your house, but if your kids have a pet sheep, remember that sheep are incredibly sensitive to copper poisoning. Never let sheep get around copper minerals, or copper pipes for that matter. In like manner, one should never put minerals like pyrite, chalcopyrite or marcasite into a fish tank as they will rapidly decompose and kill the fish. When using specimens to build a colorful fireplace or barbecue, avoid the sulfides as they can fume badly, as well as stink remarkably when they get hot. Obviously one never uses cinnabar in a decorative fireplace, as with even modest heating cinnabar gives off mercury vapor, which is poisonous. Incidentally, this is why when cutting and polishing cinnabar samples, they are always kept wet and cool. A harmless mineral

(continued next page)

Most Minerals Are Safe to Handle, A Few Require Real Caution (cont.)

that stinks terribly when being cut is sphalerite. As long as you have good ventilation, just ignore the sulfur smell and grind away.

As a point of caution, if you use ethylene glycol as a coolant in a trim saw, inhaling the fine mist that is created by the cutting process will make you very ill in a very short time. Choose your saw coolants with great care if you are working with an open blade and hand-held samples.

THE BOTTOM LINE IS THAT THE DOSE MAKES THE POISON. No matter what the mineral is, if you keep the dose down by practicing good hygiene, avoid inhaling dusts and vapors, do not handle food or cigarettes without really good hand washing, and do not foolishly lick a sample you cannot identify, you can safely collect just about anything. We have a nice arsenolite sample from Manhatten, Nevada, in our collection. We do not handle it and never let anyone else handle it. That is just good common sense. We have a nice sample of villiaumite, sodium fluoride, in our collection, but we would never try to lick it. To do so creates hydrofluoric acid, which is hard on one's tongue. We never lick a mineral, we NEVER let little kids play on mine dumps or in mine workings where there are apt to be soluble minerals of the heavy metals, and we keep our collection of radioactive minerals in a separate well-ventilated building.

Important Dates in January	
16th- Michael Byrd, birthday	28th- Bob Clark, birthday
20th- Carroll Edge, birthday	

REPORT FROM THE SCFMS CONSERVATION AND LEGISLATION CHAIR

Terrell W. "Terry" Proctor

From SCFMS Newsletter Nov.-Dec. 2011

At the present time, we are keeping our powder dry on proposing legislation on the ill-named "Paleontological Preservation Act". Until we have a Congress (both the House and the Senate) and a President who will be willing to pass the changes in this law, it is probably unwise to run with the changes. However, rest assured that we have not forgotten that this terribly unwise piece of legislation was passed along with about 3' or 4' stack of Bills which most of our elected representatives did not have time to read and the President, I understand, signed them into law without any delay (contrary to campaign promises of transparency and a reasonable delay after passing legislation before signing same.

Some have hopes of simply repealing this law and others want to amend it to allow rockhounds the right to collect most vertebrate fossils on Federal Lands without fear of violation of this now U.S. law prohibiting same. For those who may not know, one learned scholar, Dr. Robert W. Sinibaldi, former President of the Tampa Bay Fossil Club, in his recent book "What Your Fossils Can Tell You" (amazon.com) says that the average prehistoric shark shed something like 400,000 teeth in a lifetime. That makes picking up a fossil shark's tooth on a Florida Beach place being a violation of Federal Law seem ridiculous--which it is. How many bison roamed the U.S. for hundreds of thousands of years, leaving their bones and teeth by the millions in the U.S.? So finding a bison tooth on a Texas Pleistocene Beach and picking it up to show at a rockhound show, becoming a violation of Federal Law seems ridiculous--which it is.

But the Revolutionary Army learned to keep their powder dry and fight the battle at the right time. So did General Houston at the battle of San Jacinto, after many a hero lost his life at the Alamo. We will know when to proceed on correcting this bad legislation. Just stay ready to support it when the time comes. Rep. John Culberson, who has been a member of the Houston Gem & Min. Soc. and gone on a field trip(s) with our Paleo Section, looked out for us on this legislation for years, preventing it from being passed. Then the ability to prevent this Bill, was swept away, by the reversal of political powers several years back as most of you know who know the history of this legislation. Now is not the time to try to reverse things so that Mom, Pop, Kids and Rockhounds can safely have a field trip and pick up a fossil to show others about ancient life in America without facing Federal punitive action against such persons. Keep your powder dry, my friends. When the time is ready, we will need all good rockhounds to contact our U.S. Representatives and Senators and get on board a campaign to repeal or change the silliness of this unfortunate law as now passed.

A Rock By Any Other Name...

Leaverite: Also known as Dropite, Junkite and Crudite. This type of rock should be discardedimmediately. It constitutes 90% of most rocks. This includes Sourgrape Agate and Mutilated Quartz.

Sack Rock: This is material that is stuffed into a sack but falls from the top as the bearer struggles back to the car. If taken home, it will be tossed into a corner and be forgotten.

Wonder Rock: You always wonder why you brought it home, and where you found it.

Braggin' Rock: Also called Pocket or Eating Rock. This material is licked, rubbed, spit upon, or fondled until it assumes a near polish and is frequently passed around for admiration.

%*^&# Rock: A large, heavy, possibly angular rock that falls on your foot as soon as you have removed your hiking boots.

[From Rock Chip Reporter, FarWest Lapidary & Gem Society, Coos Bay, OR (Feb. 2004); via Gems from the Redwoods and Gem

Is it a CZ (Cubic Zirconia) or Diamond?

If the stone is loose, turn it upside down on its table and slide it over a thin black line on a piece of paper. When looking straight down through a CZ, you will see a circle in the center of the stone. A diamond won't do this.

From Delvings - 11/04 by Don Ashbury Via The "Rock Rollers" Spokane June 2005 via The Rock Vein, Dec 2005, via Arkansas Rockhound News 6/11

A GOOD YEAR

A brand new year is given us, it could be likened to a stone.

It can be polished and enhanced, or it can be left alone.

We can sit and watch it pass, and wish we had our youth,

Or we can use the years we have in search of love and truth.

This year can be a better year, we can shine it to a glow.

No year is bad, no year is good, just people make it so.

Let's plan this year to be our best by sharing love with others,

For peace will never thrive on earth until we live as brothers.

From Chiasto-Hi-Lites, via Surrey Rockhounder 12/08, via Calgary Lapidary Journal 12/11, via Rocky Mountain News 12/11

Upcoming Shows

January

1-31—QUARTZSITE, ARIZONA: Wholesale and retail show; Desert Gardens RV Park; 1055 Kuehn St.; I-10 Exit 17; Sun. 9-6 daily; free admission; crystals, minerals, rough, polished, jewelry, lapidary equipment; contact Sharon or Sandy, 1055 Kuehn St., Quartzsite, AZ 85346, (928) 927-6361; e-mail: dggemshow@ureach.com; Web site: www.desertgardensrvpark.net

21-22—FREDERICKSBURG, TEXAS: 43rd Annual show; Fredericksburg Rockhounds;Hill Country Gem Mineral & Fossil Show. Sat. 9-6, Sun. 10-5. In the Pioneer Pavilion of Lady Bird Johnson Park, on Highway 16 three miles south of Fredericksburg, Texas. http://fredericksburgrockhounds.org

27-29—TYLER, TEXAS: Annual show; East Texas Gem & Mineral Society; Rose Garden Center; 420 Rose Park Dr.; Fri. 9-5; adults $3, students $1, Scouts in uniform free; Grand Prize drawings, silent auction, Wheel of Fortune, show cases, 11 dealers, gemstones, jewelry, fossils, minerals, geodes, lapidary demonstrations Rock Food Table; contact Keith Harmon, 8316 Oxford Dr., Tyler, TX 75703, (903) 581-4068; e-mail: keithharmon19@yahoo.com

February

18-19—GEORGETOWN, TEXAS: Annual show; Williamson County Gem & Mineral Society; Community Center; San Gaberial Park; Sat. 10-6, Sun. 10-5; adults $2, students $1, children (under 6) free; Rollin' Rock Club meeting Sun.; contact Wanda Reynolds, 2100 Magazine St., Austin, TX 78727, (512) 461-0084; e-mail: dragon.reynolds@hotmail.com; Web site: www.wcgms.org

25-26—PASADENA, TEXAS: Annual show; Clear Lake Gem & Mineral Society; Pasadena Convention Center; 7902 Fairmont Pkwy.; Sat. 10-6, Sun. 10-5; adults $5, students $1, children (under 12) and all Scouts and leaders in uniform free; Scout merit badge assistance, children's Gem Mine and activities, displays, fossils, gems, minerals, hourly door prizes, grand prize, selected dealers; contact Ben Duggar, 2109 Laughing Gull Ln., League City, TX 77573, (281) 316-6710; e-mail: saildug-gar@verizon.net; Web site: www.clgms.org

"Code of Ethics"

- I will respect both private and public property and will do no collecting on privately owned land without permission from the owner.
- I will keep informed on all laws, regulations or rules governing collecting on public lands and will observe them.
- I will, to the best of my ability, ascertain the boundary lines of property on which I plan to collect.
- I will use no firearms or blasting material in collecting areas.
- I will cause no willful damage to property of any kind such as fences, signs, buildings, etc.
- I will leave all gates as found.
- I will build fires only in designated or safe places and will be certain they are completely extinguished before leaving the area.
- I will discard no burning material - matches, cigarettes, etc.
- I will fill all excavation holes which may be dangerous to livestock.
- I will not contaminate wells, creeks, or other water supplies.
- I will cause no willful damage to collecting material and will take home only what I can reasonably use.
- I will practice conservation and undertake to utilize fully and well the materials I have collected and will recycle my surplus for the pleasure and benefit of others.
- I will support the rockhound project H.E.L.P. (Help Eliminate Litter Please) and will leave all collecting areas devoid of litter, regardless of how found.
- I will cooperate with field-trip leaders and those in designated authority in all collecting areas.
- I will report to my club or federation officers, Bureau of Land Management or other authorities, any deposit of petrified wood or other materials on public lands which should be protected for the enjoyment of future generations for public educational and scientific purposes.
- I will appreciate and protect our heritage of natural resources.
- I will observe the "Golden Rule", will use Good Outdoor Manners and will at all times conduct myself in a manner which will add to the stature and Public Image of Rockhounds everywhere.

Revised July 7, 1999 at the AFMS Annual Meeting

VGMS Slab Gab

Patty Shay, Editor

306 W. Houston

Refugio, TX 78377