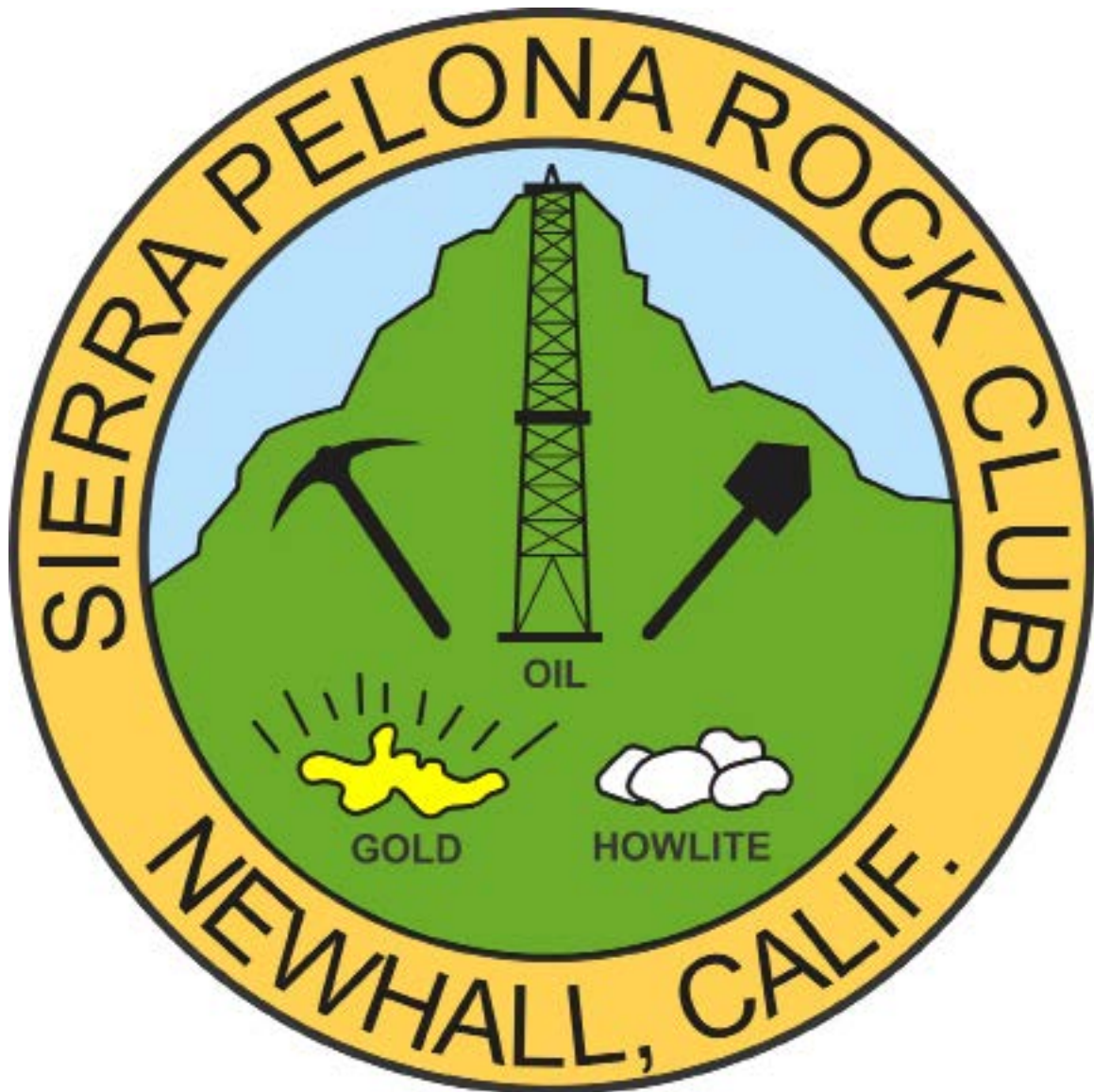


The Sierra Pelonagram



January 2016

... Member of the California Federation of Mineralogical Society Inc. ...

The Sierra Pelona Rock Club is a non-profit organization founded in 1959 with the objective to sponsor activities and promote interest and education in: mineralogy, lapidary, geology, paleontology and related subjects.



Our new president, Ron Rackliffe, working hard to bring home Treasures of the Desert.

A great big Welcome to our newest member Betsy Swallow. She will be formally presented at our January General Meeting.

Congratulations to our new board! Some of the board more or less shifted positions and we have a new member and an open position, so welcome:

Ron Rackliffe	President
Trina Aeen	vice-President
Sandy White	Treasurer
Tina White	Secretary
Open	CFMS Representative



Does this look like you? Come to our General Meeting the 3rd Tuesday of each month to learn all you want about a fascinating subject!

January

Bonnie Forstner	Jan. 14
Larry Holt	Jan. 29
Martin Schreiner	Jan. 9
Bruce Velie	Jan. 3
Austin Williams	Jan. 5

February

Roxanne Heagy	Feb. 7
Margie Krug	Feb. 1
Brigitte Mazourek	Feb. 1
Tina White	Feb 17

Birthdays: All you winter babies, have a wonderful birthday!



Officers:

President – Ron Rackliffe
 Vice-President – Trina Aeen
 Secretary: Tina White
 Treasurer –Sandy White
 Federation Director (CFMS/AFMS) --Open

Chairpersons:

Claim--Mike Serino
 Donation Rock Table--Ron and Akiko Strathmann
 Equipment--Bill Webber
 Field Trips – Greg Langwisch
 Historian -Open
 Hospitality – Tina White
 Membership – Heidi Webber
 On-Line Presence (website)-- Larry Holt
 Pelonagram Publisher, Editor – Heidi Webber
 Programs –Open
 Publicity –Bruce Velie
 Storage--Bill Webber
 Sunshine--Brigitte Mazourek

The Sierra Pelona Rock Club, is a member of the California and American Federation of Mineralogical Societies, Inc. (CFMS/AFMS). The general club meetings (Open to the public) are at 7:30 PM, on the 3rd Tuesday of each month at:

**The Clubhouse of the Greenbrier
 Mobile Estates EAST
 21301 Soledad Canyon Rd
 Canyon Country, CA 91351**

Contact the Club or the Sierra Pelonagram Editor at:

**Sierra Pelona Rock Club
 P.O. Box 221256
 Newhall, Ca. 91322**

Or e-mail: hwebber@pacbell.net

Visit the *SPRC* website www.sierrapelona.com

SPRC General Meeting
December 19, 2015
Greenbrier Estates Clubhouse

This meeting was held as part of the SPRC Holiday Party. Greg Langewisch called the meeting to order at 1:00 p.m.

Greg then announced the 2016 Board Members, stating that no election was necessary as no more than one person had expressed interest in any one of the positions.

- President: Ron Rackliffe
- Vice President: Trina Aeen
- Treasurer: Sandy White
- Secretary: Tina White
- Federation Liaison: OPEN

Various chairperson positions, e.g. Field Trip Chair, are to be appointed by the new President; anyone interested in such a position, please contact Ron R.

Our newest members were introduced: Shannon and Bob Peters

Also announced as new a member was Rick Ane, who was unable to attend today.

The next Club Workshop is scheduled for February 6th at the Webber's (weather permitting); additional information will be provided closer to that date.

A wire wrapping session will be scheduled for the following Wednesday (2/10) at the Greenbrier Clubhouse.

The January field trip will be held on January 30th, in conjunction with the Antelope Valley Club. Our destination will be out by Kramer Junction/Four Corners.

Bill Webber announced that he would be going to Johnson Brothers during the following week; anyone in need of anything there should let him know by Monday.

The meeting ended at 1:08 p.m., with attentions directed towards the silent auction table at the back of the room.

SPRC Board Meeting
January 5, 2016
Greenbrier Estates Clubhouse

The meeting began at 7:08 p.m. In attendance were Trina Aeen, Omid Aeen, Ron Rackliffe, Heidi Webber, Bill Webber, Sandy White, and Tina White.

The Webbers presented an invoice for the supplies (saw blades, etc.) purchased for use at Club workshops; as signatures have not yet been changed over from Ron to Sandy as treasurer, Ron will cut them a check.

Heidi also reminded Ron that she needs a President's Message for the next newsletter.

It was decided that the official January field trip will indeed consist of joining the AV Club on their trip on January 30th. Destinations include Kramer Junction/Four Corners, Brown Butte, and perhaps the museum at Boron. Trina will get the necessary details on the trip from Paul Hobbs for sharing with our group.

A number of Club members will be headed to Quartzsite for the Pow Wow the week of January 20th – 24th; some are going for the day on Saturday 1/23.

Our February field trip – scheduled for Saturday, February 20th – will be to Ballarat and Sheep Spring; details will be decided upon and shared closer to that date.

The next workshop at the Webbers will be held on Saturday, February 6th, from 10:00 a.m. through mid-afternoon (weather permitting). Heidi will be making a variety of warm and tasty soups; attendees are requested to bring \$5 to cover her costs.

A wire wrapping workshop is scheduled for the following Wednesday, February 10th, at 7:00 at the Greenbrier Clubhouse.

Ron addressed the subject of Committee Chairs; it was agreed that the following positions are filled:

- ~ Newsletter: Heidi W.
- ~ Field Trips: Greg L.
- ~ Auction Table: Akiko & Ron S.
- ~ Sunshine: Brigitte M.
- ~ Hospitality: Tina W.

We are still in need of a CFMS Rep., although Ruth H. has said that she will be attending the meeting anyway, and will keep us apprised of what goes on.

Heidi brought us the application of a prospective new member, Betsy Swallow; her application was unanimously approved. Welcome, Betsy!

Ron shared his concern over future meeting programs, as we have no official Program Chair. As Trina pointed out, recent programs have been related to the next field trip destination, and offered to continue putting the information together if Ron will be willing to give the presentation. All were amenable to that plan, with the addition that Tina will also research and present the program for some meetings.

Bill reminded us of the Placerita Canyon Nature Center Open House on May 14th; along those lines, he was reassured that we have sufficient tumbled rocks to carry us through that event (even with the sale of ½ of them to the Culver City club).

The next General Membership Meeting will be held on January 19th at 7:30 p.m. in the Greenbrier Clubhouse.

Dues do be due now; payment may be made by mail or brought to the January meeting.

Ron will send the membership an email addressing dues, the next meeting, the January field trip, and Quartzsite.

The meeting ended at 7:45 p.m., and all left before it started to rain again...

Caveat Emptor

Whether a dealer selling these things is doing so because he's too stupid to realize that what he's got isn't real or because he knows he can make money selling such merchandise to less-knowledgeable collectors. The buyer must beware! Although this article is far from being a complete guide to the hazards of buying at mineral shows, it will give you a basic idea of things to look for so that you can avoid the most common scams-and save your hard-earned money so that you can buy authentic specimens.

Trade names

Over the years, some minerals have been given trade names, and these names are well-known and accepted in the mineral community. One of the best known of these are Herkimer diamonds, which are exceptionally clear quartz crystals, and the obsidian gem known as Apache Tears. Some mineral names are more like blankets: the term onyx usually refers to a variety of cryptocrystalline quartz types and is widely used when referring to material used for jewelry, particularly cameos. Also many other minerals are labeled onyx.

Other trade names are intended to give the re-named mineral more appeal. Surely larium sounds better than pectolite and tanzanite better than gem zoisite. Artisans use these minerals in fine jewelry, and there is certainly nothing wrong with owning and wearing fine jewelry just as long as you're aware of what you're buying.

Scam artists take the concept of the trade name to new levels. One very common trick is to give a practically worthless mineral a super-special name. The more exotic the name, the stronger the customer's perception that the mineral has some special properties and therefore must be of greater value. In short, the name can make an otherwise ordinary mineral appear to be something truly remarkable. And truly remarkable translates to more profit as demand for these special minerals rises.

Beware minerals with exotic names like tyrkenite (fake synthetic turquoise), aqua aura (metal coated quartz) or azeztulite (ugly quartz with a fancy name). The latter in particular demonstrates all the earmarks of fraud: a fancy name for an unremarkable mineral, special powers, and a connection to (I kid you not) extraterrestrials.

Metaphysical Powers

It is your own choice if you believe in any healing or spiritual properties of minerals. However, the dealers who cater to the New Age crowd (aka healy-feelies) are some of the most manipulative and predatory sellers you can find at any mineral show. They target these well-meaning but uninformed people (who consider themselves to be enlightened), selling specimens at wildly inflated prices and providing forged authenticity certificates for their wares.

(Editor's note: there is a difference between people who feel a connection to minerals and the New Age crowd, who think that they can buy their spirituality. Please remember this.)

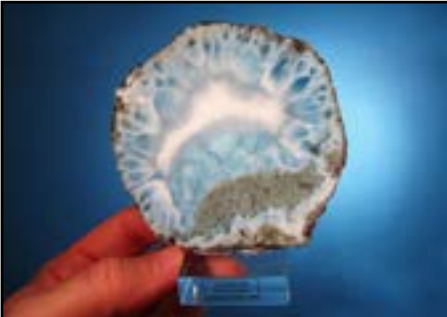
These dealers accomplish their goal of becoming rich in two ways: by assigning special powers to known minerals such as sulfur or tourmaline, or by assigning special names to ordinarily less-desirable minerals. In either case, the result is higher prices for collectors and spiritualists alike.

Look in any book on mineral properties or crystal magic and you will find names that will make you blink in disbelief. Angel Aura Quartz, Angel Phantom Quartz, Angel Wing Blue Anhydrite, Angelite...Really? How could anyone think that these were real mineral names? How about Celestial Quartz, Elestial Quartz, Fairy Wand Quartz, or Dream Quartz - notice how the focus is on a common mineral in order to increase its value! Let's not forget Lemurian Seed Crystals and Trignonic Nirvana Quartz!

The greatest fraud of them all is Azeztulite. The New Age crowd are in love with it, and will pay dearly for it, especially if the seller provides a certificate of authenticity. Azeztulite is just common - and I mean common, as in crush it up for your driveway common - quartz that has been assigned certain spiritual properties. Word of new minerals for



Artificially colored agates are present at almost every mineral show. Photo: Zbyněk Buřival



Larimar is colored variety of pectolite from Los Chechese, Dominican Republic. Size: 9 x 8.5 cm. Photo: Marcel Vanek



Fake turquoise made of plastic is often called tyrkenite - this fools the buyer and seller can anytime start excuses that it is not labeled turquoise. Photo: Zbyněk Buřival



Aqua Aura (pale blue) and Titanium Rainbow Quartz (dark) are just common quartz specimens covered by metal vapor under vacuum. Photo: Zbyněk Buřival

spiritual use moves like wild fire in this community - in the case of Azeztulite, it is through a book written by the discoverers of this allegedly useful spiritual mineral. Called The Book of Stones, it describes the spiritual properties of everything from adamite to zoisite. A cursory examination of the book also reveals that virtually every mineral interacts in a positive fashion with Azeztulite. Imagine that. The name Azeztulite has also been copyrighted. Does that send up any red flags with you? It should!

Another example is shungite. New Age websites describe shungite as the only known natural material known to contain fullerenes, which they state are powerful anti-oxidants. It is thought that the fullerenes in this stone will cleanse water and then, as a spiritual bonus, infuse it with potent healing vibrations. Furthermore, it is claimed that the energy embodied in shungite absorbs and eliminates anything that is a health hazard to human life and that it has other active metaphysical properties including strong healing powers.

It turns out that actual pure shungite is extremely rare. Most shungite that can be found in New Age shops and at mineral shows is actually perhaps 1 % shungite and 99 % hard coal, and a great deal of it contains no shungite at all. It is true that it can purify water, but any piece of coal - soft or hard, or even charcoal - can do the same. For \$50 you can buy a piece of shungite or a truck load of soft coal: the purifying effect is the same. By the way, fullerenes were originally extracted from soot.

Fake localities

Many collectors are willing to pay top dollar for specimens from classic mined-out localities. In order to capitalize on this demand, dishonest dealers buy loads of similar, less expensive minerals from highly productive mines in countries like China or Brazil and label them as being from more desirable localities. It is very difficult for inexperienced collectors to spot such frauds, especially if the dealer has chosen his specimens wisely and has not made the mistake of making the price too low. Beware of specimens that don't look quite like the ones you've seen from a locality, or ones that are being sold at far below the prices other dealers ask. For many, however, the only way to avoid this pitfall is to buy specimens from reputable dealers.

Heat treatment

Some minerals change their color when heated, and provide a ready source of fraudulent specimens for unscrupulous dealers. Most common among these heat treated frauds is the deep orange citrine from Brazil. Natural citrine is usually very light yellow or rarely saturated yellow: if you see a cluster of dark orange citrine, it is heat treated Brazilian amethyst for sure! I've never seen a natural citrine with such orange color. Also, keep in mind that citrines usually come from pegmatites, not from melaphyre (paleobasalt) volcanic vugs.

(Editor's note: the price for citrine of any kind is kept higher because it is a key mineral to the New Age crowd. For entertainment value, ask one of these folks if the heated treated amethyst has the powers associated with amethyst or those associated with citrine. Their heads will explode.)

Some other examples include aquamarine from Ukraine (heated heliodor) or some of the deep blue zoisite (called tanzanite) from Tanzania. Unfortunately, the natural tanzanite also exists and there is still huge debate of how many tanzanites are genuine natural material.

Precious opal and water

People love the attractive colors and flash of opals, but for the inexperienced collector, buying opals is a mine field of fakes and frauds. Insidious dealers have found a dozen ways to take advantage of the demand for opals. Both precious and fire opals often lose their opalescence after drying, and it is very difficult to tell which ones will and which will not. Do you see that display of opals sealed in little bottles of water? Stay away! What you see is not what you get! Another common practice is to wet the opals a day before the mineral show. The opals retain the water - and their opalescence - for a short time only. Other tricks include coating opals with nail polish or oil or creating fake precious opals from plastic. As with other minerals, beware specimens that are allegedly from a specific locality that in this case might be noted for stable opalescence. An inexperienced buyer has only slim chance of spotting tricks like these.

Dyed minerals

Experienced collectors blanch at the things people do to minerals in order to sell them, and dyed specimens are enough to drive them to drink. Slices of polished agate that have been saturated with bright pink, blue or purple dyes are among the worst: just thinking about them makes collectors shudder. Even natural looking agates may be slightly manipulated in order to enhance the contrast between colors, making it difficult to get a genuine Brazilian agate - you can't be 100% sure that your agate is unaltered unless you A great deal of creativity goes into scams like this: miners paint calcite clusters pink and sell them as rhodochrosite (close examination will reveal the paint). Some faked geodes or genuine quartz geodes from China or Morocco can be also colored using pink, purple or metallic paint. Indian dealers often color white balls of okenite. Most of the turquoise on the market is dyed magnesite. Some saturated blue hemimorphite is simply dyed aragonite.



Most citrine on the market is heat treated amethyst from Brazil. Photo: Zbyněk Buřival



Heat treated amethyst from Brazil gets the typical orange color and is sold as citrine. Photo: Zbyněk Buřival



Do not buy precious opals or fire opals sold this way - even very low quality opals might show nice opalescence when wet. Photo: Zbyněk Buřival



Dyed magnesite is another example of creating fake turquoise. Photo: Zbyněk Buřival

Artificial and synthetic minerals

Completely artificial minerals are quite widespread. These include crystals of copper sulfate (chalcantite), complex aluminum sulfates (tschermakite or cermikite), chromates, urea, industrial bismuth, silicon carbide, green zincite and many others. Many sulfates are soluble in water and decompose in time; chromates, which are also soluble, are highly toxic.

The special type of scam are faked crystals and pseudomorphs. Some gold crystals from Russia is just melted gold cast into the special form. Some malachite or copper pseudomorphs after aragonite (often originating in Peru or Chile) or calcite (Morocco) were made by soaking aragonite or calcite crystal in a copper sulfate solution. Other tricks include amber, turquoise or precious opal made of plastic, turquoise made of gypsum etc.

Synthetic minerals range from lab grown quartz crystals to man-made examples of gems such as zircon, emerald, ruby and sapphire. Synthetic gem diamonds do exist but they are more expensive than the natural diamonds. It is often very difficult to recognize synthetic gems without special lab tools and a great deal of experience. Green quartz is created by putting normal low quality quartz clusters with water and color agent (typically chromium) under high pressure. Also moldavites are sometimes created from green glass or remelted moldavite chips. Some native silver wires on acathite (mostly from Imiter, Morocco) were created by heating the acanthite cluster. Some sulfur crystals from Italy are man made. Many nice copper crystal clusters were grown in copper-rich mine waters. Copper clusters and silver wires also grow in smelting factory chimneys.

Coatings

Coating minerals with metal vapors under vacuum has become very popular in last few years. The result of this process includes very popular and often overpriced junk like aqua aura quartz, titanium quartz, rainbow quartz and others. Some dealers disclose that these minerals are treated but most don't. These coated quartz clusters are especially valued by the New Age crowd (see above).

Repairs, reinforcement and conservation

Experienced collectors know that not all specimens are collected in pristine condition. Many crystal pockets have been damaged by tectonics or weathering or by quarrying equipment (or by the hammer of the collector.) Because of this, many minerals require some repair or conservation. Pyrite and marcasite are typical examples of minerals which easily decompose if they are not properly cleaned and conserved. There is nothing wrong with the sale of repaired and/or conserved specimens if the repair or conservation is done reversibly and is fully disclosed. Problems occur when an old collection is sold after the death of the original owner and the information about any repairs might be lost.

Sometimes small chips or part of crystals are missing. A person doing reconstruction might repair these voids by filling the empty spaces with a substance like a polymer. However, many collectors consider such reconstructions unacceptable.

Faked clusters or geodes fall into a special category. These originate in places like Morocco, China, India, or Romania. Local miners glue crystals together or to a matrix. The cluster is then covered by fine mica or crushed mineral mixed with glue. Some of these faked clusters are obvious but those that are skillfully crafted are extremely difficult to recognize. Soak the suspicious specimen in the acetone and see what falls apart. Faked geodes made of gypsum and filled with crushed galena or other eye-catching material can fool only inexperienced buyers.

Grinding and polishing of damaged crystal faces of quartz is very common. Some crystals are in fact complete fakes cut from big quartz chunks and then polished. The same can be said for some Colombian emeralds and Brazilian aquamarines. Be sure to check surface of suspicious crystals: the polished surface usually has a slightly different luster, and has no growth patterns or striations (these textures are quite distinctive) and often is slightly curved.



Awesome clusters with lab grown chalcantite are often sold as natural specimens from Poland or Ukraine. Photo: Zbyněk Buřival



These nice bismuth clusters are lab grown too. Photo: Zbyněk Buřival



Artificially pink colored quartz geodes from Morocco and completely faked geodes created from gypsum, crushed galena and paint. Photo: Zbyněk Buřival

Irradiation

The color of many minerals is caused by tiny structural defects caused by natural irradiation. Unfortunately, some dishonest dealers cleverly irradiate their specimens in order to enhance their color. The smoky quartz with dolomite from Turt, Cavnica or other localities in Romania is particularly famous: it used to be normal white hydrothermal quartz. Another example of irradiated specimens is the fake rubellites (pink tourmaline) from Afghanistan. Many irradiated specimens lose their color if exposed to direct sunlight for some time.

Other irradiated material includes very dark smoky quartz from Arkansas (originally rock crystal) and saturated heliodor crystals from Tajikistan or Pakistan (Afghan aquamarine). The color of some blue topaz or aquamarine from Brazil; dark blue barite from Romania or dark brown topaz from Pakistan are caused by irradiation as well.

Gem fakes

There are so many gem frauds that it could fill a whole book: Color improvements by artificial coloring, heat treatment or irradiation. Filling internal fissures and inclusions by oil or other materials, selling synthetic gems as natural and many other tricks. The colors of moonstone in jewelry can be enhanced by adding a coat of blue nail polish to the back of the cabochon. (Editor's note: that moonstone jewelry is mine.) Be extremely cautious when buying gems - both rough and faceted. Buy only from certified and trusted dealers and require that they provide all the proper documents. Buying gems directly from miners in the foreign countries is for gem experts only.



Left: Natural milky quartz with dolomite from Cavnica, Romania. FOV: 7 x 7 cm. Photo: Zbyněk Buřival

Right: Irradiated quartz 9 cm tall from the same locality. Photo: Vítězslav Snášel

Dues are Due

Yep, we will keep vugging you! It is that time of year again, club membership dues are due as of now. You can either mail a check to treasurer Sandy White (see the roster you just got via email for her address) or give it to her at the meeting on Jan. 19. They need to be paid by the February Business meeting on February 2 or they will be considered late and a \$2 late fee will be assessed.

We hate to be harsh about this, but we have to pay the CFMS our share (from your dues) for club liability insurance and everyone has a deadline of some sort. AND as long as you are at it, go ahead and pay your fees to any other club you belong to that are now due!!!

How to avoid buying fake minerals?

But mineral fakes and frauds have become so commonplace that you can see many of the treatments mentioned above at each and every mineral show you attend. I don't want to offend any honest dealer or serious mineral collector selling leftovers at shows, but buyers must stay extremely cautious and critical when they shop.



Deep blue gemmy zoisite is called tanzanite. Many of the second grade quality pale or brownish zoisite crystals from famous place in Tanzania were heat treated. Biggest crystal height 12 mm. Photo: Marcel Vanek

How can the average collector avoid these pitfalls? Avoid impulse buying; if a specimen is too cheap to be true, it probably isn't what you think it is. Think twice before buying that expensive specimen from a classic site. Bring a loupe and use it. Watch for unnaturally bright colors, unusual textures, and weird coatings on crystals. Always require a receipt or invoice for any expensive purchase. Be aware that sometimes even serious dealers get fooled by dishonest miners, so you can too. Be careful!



Another batch of dyed agates from Brazil. Photo: Zbyněk Buřival

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