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WHITTIER



**ROCKHOUNDING**  
GEM & MINERAL  
SOCIETY

**PICNIC IN THE PARK!!!**  
**June 25 at 6:30 PM**  
**Michigan Avenue Park**



To paraphrase Crocodile Dundee:

*“ You call that a knife... er, Gem Tree ? ”*

Gem Trees created by Ferdie Sanchez, done in the “Bonzai Style”.

(Seen at the Pasadena Lapidary Society’s 2015 Gem Show. )

# ROCKHOUNDER

## THE PREZ SEZ:

By now you've probably heard that I've had some medical issues. Well I'm though the issues and now I'm on the mend. Soon I'll be out there collecting rocks and having a ball with the rest of you.

June 12th, 13th & 14th are the dates for the Federation show this year in the town of Lodi at the fairgrounds and it's called "Rocks and Vines".

Summer is almost here and that means vacation trips to that special place only you know about. We'll be "dark" for the months of July and August and back in September. Summer will give you time to get your case(s) ready for our show.

As in most years, we don't have a regular meeting in June. Instead we're going to have a picnic in the park this month. There is more info later in the bulletin. (Pages 4 & 13)

The fieldtrip for this month is to the Himalaya mine on the 20th, hope to see you find that special stone this month.

Somewhere in Calif.?

*L q g " I q g*



**WGMS General Meeting**

**Thursday, June 25, 2015**

**at 6:32 " R O**

**"Picnic (Potluck) in the Park"**

*\* O k e j k i c p " R c t m . " V j c v " K*

**I**t is a long-standing tradition of the Whittier Gem & Mineral Society to celebrate the start of summer with a potluck in place of the regular June meeting. This goes back to 1950s.

So once again, it is time for our annual **WGMS Picnic/Potluck in the Park**. It is going to be held on **June 25 at 6:30 PM**. The place is **Michigan Avenue Park** (see map page 13). Come enjoy the camaraderie and delicious food with our fellow club members and friends.

As always, you should bring an entrée, salad, dessert or side dish to share, and don't forget that it is BYO (bring your own) plates, silverware (or plasticware) and drinks. You should also bring conversation, friendship and perhaps a little attitude to enhance this pre-Summer outdoor dining experience.

*O c t e k c " I q*

**Summertime Events**

**T**hough we close during July and August, activities are planned for this summer. The Nipomo Show is always a great tailgate/show. Not all of the dates and times are known yet so we will let you know when they happen. If you have any questions contact Joe Goetz at (626) ; 3 7 2 .5 2

<b>Location</b>	<b>Date</b>	<b>Description</b>
Nipomo Show	August 1-3	Fun show, camping, etc.
Other Collecting opportunities	TBA	Day Trips, etc.

**Rockgabbers June Report**

The May Rockgabbers meeting was at Tony and Sandie's home and the project was Sandie's flower bracelet. There were 6 members in attendance and Sandie showed us the beading techniques used for this project. As usual, the meeting concluded with a pot luck dinner.

Now we start into the summer period and as several of us will be traveling there will be no meeting of Rockgabbers until October 10th. The project will be a silver chain, the specifics will be in a later bulletin.

Have a happy summer.

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**Federation Report for June 2015**

The big news for June is the CFMS show in Lodi starting on June 12<sup>th</sup> and concluding on June 14<sup>th</sup>. The show is at the fairgrounds and there is camping available at the fairgrounds. The show is being hosted by the Federation, so we hope that everybody will turn out to support the CFMS. It will feature dealers, exhibits and demonstrations, and this year our club will be represented by Jerry Turner, Sylvia Cliffe, Sandie Fender and myself demonstrating our various skills. I have tickets for the drawing which are available at \$5 a ticket or \$20 for 5. If you want any tickets, please contact me. The first prize is a beautiful amethyst carved pendant.

In September the Earth Science Studies classes will be held at Paradise in Northern California. These classes are similar to Zzyzx classes, but there are 2 weeks of classes compared with 1 week at Zzyzx. Information for the show and for Paradise can be found at the CFMS website (cfmsinc.org).

I look forward to seeing everybody at Lodi.

*V q p { " H g p f*

## **RED QUARTZ AND BLUE QUARTZ**

**by Steven Wade Veatch**

Quartz ( $\text{SiO}_2$ ) is a common mineral found in all three classes of rocks (igneous, metamorphic, and sedimentary) in many environments, and in a range of colors. Rose and blue quartz are less common than some of the other varieties. Rose Quartz has a pale pink to rose red color thought to be caused by trace amounts of titanium that absorbs all colors except pink. This may account for its rosy color. In a laboratory experiment, samples of rose quartz from several localities were carefully dissolved in acid. The remaining insoluble residue consisted of thin microfibers. These fibers may also be responsible for the color of rose quartz.

Well-formed rose quartz crystals are rarely found in nature. Rose quartz is generally found in massive chunks associated with pegmatites. The term pegmatites refers to exceptionally coarse-grained crystalline granite. Since rose quartz is cloudy, it is not popular as a faceted gem, but it is commonly formed into cabochons, rounded into beads for necklaces, or carved into various objects.

Rose quartz has been named as South Dakota's official state mineral. Here rockhounds have a good chance to find specimens ranging from shades of light pink to rose-red. Some rose quartzes from South Dakota have a distinctive asterism, a star shaped display of light on the polished surface.

Blue quartz, with a deep to sky blue color, is packed with tiny grains such as rutile ( $\text{TiO}_2$ ) and ilmenite ( $\text{FeTiO}_3$ ). Other inclusions might include tourmaline, crocidolite, magnesioriebeckite, zoisite, and several others. Some researchers hypothesize that the blue color comes from the Rayleigh scattering of light by these microscopic inclusions. Rayleigh scattering selectively scatters visible light of the shorter blue wavelength. However, the cause of the blue color still remains uncertain. Blue quartz has a waxy luster and sometimes displays asterism.

Blue quartz occurs at a number of localities. In Llano County, Texas, blue quartz is found as small, doubly-terminated crystal in a rhyolitic porphyry informally called Llanoite. The crystals weather out of the host rock and can easily be collected. Blue quartz is also found in a diorite near the Dairyland Power Dam near Tony, Wisconsin. Blue quartz was

recently discovered in the Cushing Point Formation at Peak's Island, Maine. The specimens there have inclusions with the chemistry of biotite. In the past, biotite has not been listed as a possible inclusion. Research now suggests that the inclusion of biotite on Peak's Island may be responsible for giving crystals its blue color. Blue quartz is associated with pegmatites of the Cape Ann Granitite at Andrew's Point in Rockport, Massachusetts. The author has found blue quartz at two Colorado locations: Park County near Hartsel and on the tailings of the Bull Domingo Mine in Custer County northeast of Silvercliff. A famous site - Antequera - near Malaga, Spain yields translucent crystal of intensely blue quartz.

While some varieties of quartz are well-known, such as amethyst and smoky quartz, blue quartz is a lesser known variety. The sapphire-blue quartz is wonderful to behold and exciting to find in the field. The rich blue colors hold your attention and move you to plan a collecting trip. The variable rose colors beckon the collector to cut and polish slabs of rose quartz rough. Both varieties of quartz truly deserve a spot in your collection.

### References:

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- Via The Tumbler, 12/11, Breccia, and Pack, 9/09, and West Seattle P*

**June 20, 2015 — 10am to 3pm**  
**Field Trip to the Himalaya Tourmaline Mine**  
**Dig Your Own Stones**

**What:** Tourmaline Dig Field Trip.

**Where:** We are planning a field trip to the world's most famous tourmaline mine, the Himalaya Mine near beautiful Lake Henshaw in San Diego County, 20 miles east of Pala.

**Access:** You can drive to within about 200 feet of the area, mostly on paved or maintained dirt road.

**Minerals:** Pink, green and watermelon tourmalines are what the mine is known for. Some other minerals found here are quartz crystals, apatite, morganite, clevelandite, calcite, lepidolite, feldspar, stibiotantalite, topaz, and spessartine garnet.

**Details:** Over 200,000 pounds of quality ore have been produced here since 1898. The miners tunnel into the pegmatite in search of rich pockets of tourmalines. Small pockets and individual gemstones are carried out with the overburden dirt and rocks. Now, the mine operators bring dump truck loads of the overburden material down the hill to a flat area to allow easier access for the public.

“Digging” involves shoveling ore-containing dirt into your 3 or 5-gallon bucket and pouring it into a sifting screen on a wooden bench. The results have been quite good in the past. The mine operators provide buckets, shovels, sifting screens, a tub of water to rinse the dirt off of the gravel and a table to set everything on.

**Cost:** **This is a fee-to-dig location. The fee for our group is \$50 for adults, \$25 for children ages 13-17 and children 12 years old and younger are free. All paid attendees will receive a raffle ticket for a special gem prize from the mine owners.**

**What you need:** lunch, shoes that can get muddy, sun hat, gloves, a quart slide-lock plastic sandwich bag to put your finds in, an old toothbrush for scrubbing the crystal stones, and plenty of drinking water. They will provide all tools for digging at no extra charge!

**Also available:** Bags of high grade gem pocket ore are available for purchase which can be taken home for screening. Faceted gemstones including Himalaya Mine tourmalines and Oregon Sunstones are also available for purchase on site.

**Reserve A Space:** Space on this field trip is limited to the first 30 people who confirm. A list of names will be on the list provided to the mine operators.

Mark Nelson, of the Pasadena Lapidary Society, will coordinate the trip. Contact him to reserve your place.

**(909) 996-1784 or [pasadenalapidary@aol.com](mailto:pasadenalapidary@aol.com).**

### **Directions (map on page 13)**

- < From Pasadena, take the 210 Freeway east to I-15 south toward San Diego.
- < Pass Temecula and look for CA Hwy 76, east toward Pala.
- < Continue 30.5 miles on Hwy 76 to the Lake Henshaw Resort.
- < Once you are at Lake Henshaw Resort you will need to go into the store (across from the lake and in the same building as the restaurant) and ask for the mine dig. They cashier will give you a code and directions.
- < These are basic directions. Slightly shorter routes can be found by enter-ing directions to Lake Henshaw, San Ysabel in Mapquest.com.



**Thomsonite**

**By Amethyst Gallery – “First Internet Rock Shop”**

Thomsonite is one of the rarer zeolites. It forms tight acicular radiating clusters and spherules as well as some blockier crystals that are found in the vesicles or bubbles of volcanic rock as are most other zeolites. Natrolite, another zeolite, is usually square in cross section but is otherwise difficult to distinguish from thomsonite. The color is usually colorless or white, but a few specimens have shown a lovely yellow color.



Thomsonite is a rare mineral and is sought after by collectors of rare zeolite minerals.



Zeolites are known to have an openness about their structure that allows large ions and molecules to reside and actually move around inside the overall framework. The structure actually contains open channels that allow water and large ions to travel into and out of the crystal structure. The size of these channels controls the size of the molecules or ions and therefore a zeolite can act as a chemical sieve,

allowing some ions to pass through while blocking others.

**PHYSICAL CHARACTERISTICS**

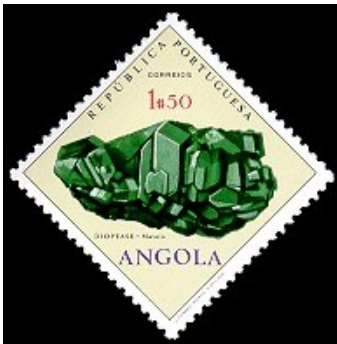
- < Color is clear, white and yellow .
- < Luster is vitreous.
- < Transparency: Crystals are transparent to translucent.
- < Crystal System is orthorhombic.
- < Crystal Habits include tight acicular radiating clusters and spherules. Blocky, prismatic, fibrous and tabular crystals are also known.
- < Cleavage is perfect.
- < Fracture is uneven.
- < Hardness is 5 - 5.5
- < Specific Gravity is approximately 2.2 - 2.4 (light).
- < Streak is white.
- < Associated Minerals are quartz, calcite, chabazite, natrolite, heulandite, stilbite and other zeolites.

- ◁ Notable Occurrences include Saxony, Germany; Italy; Faroe Islands; Kilpatrick Hills, Scotland and Kern Co., California and Cape Lookout, Oregon, USA.

Best Field Indicators are crystal habit, density, hardness and associations.

*Unless otherwise noted, all mineral are the property of Amethyst Galleri commercial purposes. Permission to copy personal and educational use only. A notice and explicit references to th Via The Tidewater Prospector, 1/15*

**Philatelic Mineralogy: who says rock collecting just has to be actual ROCKS?**



**Banded Iron Formations**

Many of us have this rock in our collections and some have made cabachons from it. It is a sedimentary rock with black bands of hematite or magnetite and red bands of silica such as chert, chalcedony, Jaspers, shale and clays. Riebeckite and siderite are sometimes found. Tiger's Eye is a banded iron.

When this rock was formed there was no oxygen in the atmosphere. The blue green algae, also called Cyanobacteria, gave off oxygen as a byproduct of metabolism. In the water this combined with the dissolved iron to form the iron oxides, hematite and magnetite which are insoluble in water. These deposited as the black layers as the early organisms lived, made oxygen and then died leaving the red silica sediments to take their turn at depositing. These rocks are trace fossils like dinosaur footprints or copralite. Evidence of a life form but not the life form.

Their age is from 3.5 to 1 billion years. All continents have these rocks. No banded iron is being formed today. Our closest source is the Lake Superior iron ranges which have supplied iron ore for industry since the Industrial Revolution.

The Tiger's Eye version of this sedimentary rock is due to low grade metamorphism creating veins of fibrous or asbestos riebeckite which in turn may be replaced by quartz. Last year the club auction had slabs of red Tiger's Eye and in previous years, blue slabs. Usually it is golden brown. Because of the asbestos masks should be worn when working with this Tiger's Eye.

Above material excerpted from: [www.galleries.com/rocks/bid.htm](http://www.galleries.com/rocks/bid.htm), Banded Iron Formation – Mineral Gallery. To see pictures of any of these rocks Google the name of the rock and click on images.

*Nancy Math*



above: brown banded Tiger's Eye, Geology.com

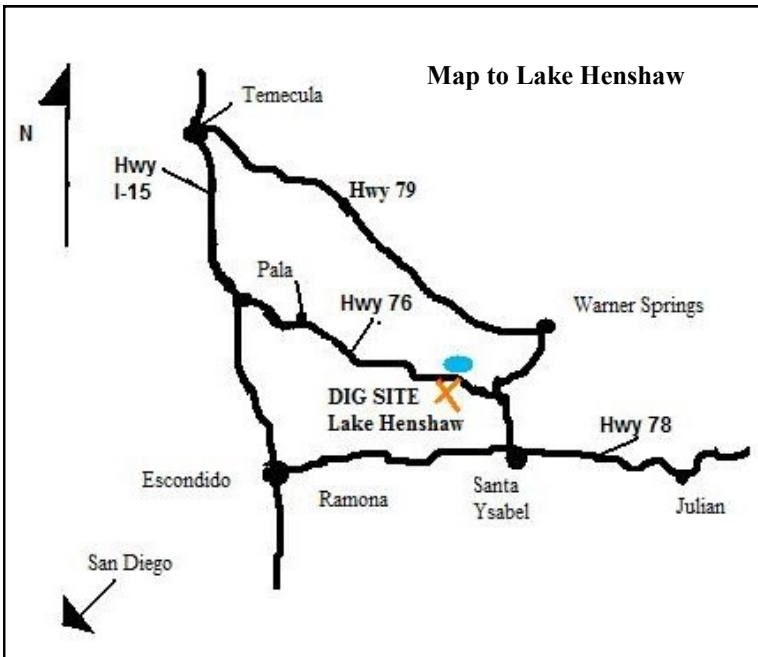


above: banded iron ore, approx 2250 million yrs old, Jasper Knob, Ishpeming MI

*V i a T h e P e t o s k e y S t o n e , 3 / 1 5*



Picnic in the Park Location Map



Information on the Lake Henshaw field trip is on pages 8 & 9

**Upcoming CFMS Gem Shows**

- June 6 - 7**     **GLENDORA, CA.** Glendora Gems & Mineral Society  
Goddard Middle School, 857 East Sierra Madre  
Hours: Sat. 10 - 5; Sun 10 - 4
- June 12 - 14**   **LODI, CA. California Federation of Mineralogical Societies**  
**2015 SHOW & CONVENTION: \$T q e m u " ( " X k p g u \$**  
**Hours: Friday & Saturday 10-5; Sunday 10-4**  
<http://www.cfmsinc.org/2015show/2015Show.html>
- Jun 27 - 28**    **CULVER CITY, CA.** Culver City Rock & Mineral Club  
Veterans Memorial Auditorium, 4117 Overland Blvd  
At Culver Blvd, near the 405 & 10 Freeways  
Hours: Sat 10 - 6; Sun 10 - 5  
Website: [www.culvercityrocks.org](http://www.culvercityrocks.org) [Show Page](#)
- Sept 26 - 27**   **DOWNEY, CA.** Delvers Gem & Mineral Society  
Elks Lodge, 11233 Woodruff Avenue  
Hours: Sat 9 - 5; Sun 9 - 4
- Sept 30 -**      **YUCCA VALLEY, CA.** Hi-Desert Rockhounds  
**Oct 4**       Sportsman's Club of Joshua Tree, 6225 Sunburst Street  
Hours: 9 - 6 daily  
Website: [www.jtsportsmansclub.com/gem.html](http://www.jtsportsmansclub.com/gem.html)
- Oct 5-6**        **BORON, CA.** Mojave Mineralogical Society  
Boron Park, 12000 Boron Avenue  
Hours: 9 - 4 daily
- Oct 3-4**        **VISTA, CA.** Vista Gem & Mineral Society  
Antique Gas & Steam Engine Museum  
2040 North Santa Fe Avenue  
Hours: Sat 10 - 5; Sun 10 - 4  
Website: [www.vistarocks.org](http://www.vistarocks.org)
- Oct 11**         **FALLBROOK, CA.** Fallbrook Gem & Mineral Facility  
123 West Alvarado Street  
Hours: 9 - 4  
Website: [www.fgms.org](http://www.fgms.org)

**WGMS MEETING LOCATION!**  
**Whittier Community Center**  
**98 Washington Ave. Whittier**



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**Bulletin exchanges:** are welcome and requests should be sent to the editor.

**Affiliations**



California Federation of Mineralogical Societies  
American Federation of Mineralogical Societies  
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**Meeting Date: June 25, 2015 at 6:30 PM**  
**Location: Michigan Avenue Park**  
**(See page 4 for information)**