

WHITTIER

ROCKHOUNDER
GEM & MINERAL
SOCIETY

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Picnic in the Park
Thursday, June 27
at Michigan Park



Young hawk watching us while we're exploring a mine outside Quartzsite

Whittier Gem & Mineral Society
Elected Officers and Committee Chairmen

2018-19 Elected Officers

President: Marcia Goetz(joenmar1@verizon.net) (626) 914-5030
1st Vice President:... Joe Goetz(joenmar1@verizon.net) (626) 914-5030
2nd Vice President: .. Kathy Valle.....(bunnie1962@yahoo.com)..... (626) 934-9764
Treasurer: Jay Valle(res19pnb@verizon.net)..... (626) 934-9764
Secretary: Sandie Fender
Federation Director: Sandie Fender
Directors: Kim Winn
..... Yvonne Morton .
..... Art Ragazzi

Appointed Chairmen

Budget/Finance:
Bulletin Editor: Jay Valle.....(res19pnb@verizon.net)..... (626) 934-9764
Bylaws & Rules Jerry Turner.....
Claim Secretary: Tony & Sandie Fender
Community Kathleen Turner.....
Relations:
Displays:
Door Prizes: Marvin & Judy Belcher
Field Trips:..... Joe Goetz(joenmar1@verizon.net) (626) 914-5030
Librarian:
Rockgabbers: Tony Fender
Show Chairman:..... Frank Winn.....(Rkhndfw@gmail.com) (626) 239-5457
Social Secretary: Kathy Valle(bunnie1962@yahoo.com).... (626) 934-9764

Regular Monthly Meetings: 7:00 PM 4th Thursday each month, 3rd Thursday in November & December. No regular meetings in July & August.
(See Map on pg. 15 or Write-up on pg. 4 for meeting place.)

Board of Directors: To be announced.

Rockgabbers: To be announced. See pages 4 & 5.

Field Trips: Monthly except July & August. See inside bulletin for details.

Annual Dues: Adults – \$15.00; Married couple – \$25.00, Junior – \$5.00
1-time initiation fee - \$5.00 per person

ROCKHOUNDER

THE PREZ SEZ:

Gentle Members,

This is the month of our potluck at the Michigan Park, in Whittier. The park is at the corner of Michigan Avenue and La Cuarta St. The potluck takes the place of the general meeting on June 27th. The club will furnish the hot dogs and buns. The June pot-luck signals WGMS's summer break for July and August.

June's gemstone is the pearl. I was reading an article recently about a man who ordered a \$14.75 stew-like dish that includes six oysters and he found a pearl. The owner of the restaurant said he'd been in business for 28 years and sell over 5,000 oysters on the half shell every day, and this was the second time this had happened. The diner said he thought the pearl was valued at \$2,000-\$4,000 but it wasn't appraised yet. At least he didn't break a tooth! June's alternative gem is the alexandrite - I don't think anyone would find that in their dinner.

Have a great summer,

Marcia

WGMS Webpage: <http://wgmsca.com/>

WGMS General Meeting

Thursday, June 27, 2019 at 6:00 PM

"Picnic (Potluck) in the Park"
(Michigan Park, That Is!!!)

So once again it is time for our annual **WGMS Picnic (Potluck) in the Park**. It is going to be held on **June 27 at 6:00 PM**. The place is **Michigan Avenue Park** (see map below). 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



Picnic in the Park Location Map

Roseville Rock Rollers

MOHS HARDNESS SCALE

- <1 Wax 0.2, Graphite 0.5-0.9
- 1 **TALC** Soapstone 1, Lead 1.5, Tin 1.5-1.8, Alabaster 1.7
- 2 **GYPHUM** Halite (Rock Salt 2, Magnesium 2.0, Aluminum 2-2.4, Amber 2-2.5, Galena 2.5, Copper 2.5-3, Gold 2.5-3, Mica 2.8
- 3 **CALCITE** Limestone 3, Boric Acid 3, Barite 3.3, Brass 3-4, Marble 3-4, Serpentine 3-4, Dolomite 3.5-4
- 4 **FLUORITE** Bell Metal 4, Iron 4-5, Platinum 4.3, Soda (soft) Glass 4.5, Glass 4.8-6.6, Opal 4-6
- 5 **APATITE** Asbestos 5, Manganese 5.0, Steel 5-5.5, Hornblende 5.5, Stainless Steel 5.5-6.3
- 6 **ORTHOCLASE** Feldspar 6, Hematite 6, Magnetite 6, Pumice 6, Pyrite 6.3, Agate 6.5-7, Garnet 6.5-7.5
- 7 **QUARTZ** Flint 7, Silicon 7.0, Tourmaline 7.3, Emery 7-9, Beryl 7.8
- 8 **TOPAZ** Case Hardened File Steel 7.8-8.5
- 9 **CORUNDUM** Alundum 9+, Chromium 9.0, Carborundum 9.3, Boron 9.5

10 DIAMOND

<http://www.rockrollers.com/features/hardness.html>

Fluorite Gemstones and Minerals

Fluorite is one of the most fascinating minerals in the world, with many intriguing properties. It is a material with important industrial applications, as well as a great favorite of mineral collectors. It is also popular as a gemstone, though it has to be cut, set and worn with care.



In fact fluorite is such a special mineral that it was the official theme of the Tucson Gem & Mineral Society at the Tucson gem show in 2013.



By chemical composition, fluorite is calcium fluoride. It is an isometric mineral that usually forms in cubic crystals, though octahedral and more complex isometric forms are seen as well.

Because fluorite produces well-formed crystals in several different habits, interesting specimens are very popular with collectors. Cubic crystals are the most recognized, followed by the octahedral. Fluorite has perfect octahedral cleavage with 4 identical directions of cleavage, and cleaved fluorite octahedrons can be found in many mineral shops.

Another distinctive characteristic of fluorite is the fluorescence that it displays under ultraviolet light. In fact fluorite was one of the first fluorescent minerals studied, and the very term *fluorescence* comes from "fluorite." The visible light emitted is

most commonly blue, but red, purple, yellow, green and white also occur. The fluorescence of fluorite is thought to be due to mineral impurities in the crystal lattice.

Fluorite has generated interest as a gemstone because of its wide range of colors and its attractive luster. Fluorite is found in nearly every color, ranging from purple and blue to green, yellow, orange, red, pink and brown. Banded multicolored specimens are common, and a color-change variety is rare but known. The color-change can be well-defined, typically showing a change from blue under natural light to purple under incandescent light.

Because fluorite is a relatively soft material -- rating on 4 on the Mohs scale -- it is suitable mainly for earring and pendants. It can be challenging to cut because of its perfect cleavage and it has to be handled carefully when set in jewelry.

<http://www.ajsgem.com/articles/fluorite-gemstones-and-minerals.html>

Confusing Rockhound Definitions

BARIUM –What to do with your clothes after encountering a skunk.

CORAL –A place to keep horses.

FIELD TRIP –An impossible trek to an inaccessible place for nonexistent specimens.

MICROMOUNT –A very small horse.

ROCKHOUND –A person who scolds his little boy for picking up a piece of candy that was dropped in the dirt, but will lick a piece of agate to see if it will polish.

The Glacial Drifter, 4/19

Dinosaur Dental Discoveries

Looking at an animal's teeth can provide a lot of information on how the animal lived. This is particularly useful when the animal is extinct, or no longer exists in the world we live in. Dinosaur teeth can tell you many things about it, such as the type of food that it ate, how it got its food, and how it digested its food (did it chew food, crush or grind food, or just eat it whole?).

Teeth are much harder than bone, and so they fossilize more readily. Countless fossilized dinosaur teeth have been uncovered. Some dinosaur species such as *Cardiodon*, *Trachodon* and *Deinodon* are only known to have existed because of their fossilized teeth.

By looking at the shape of the dinosaurs teeth we can figure out what they ate when they were alive. *Allosaurus* had long teeth with sharp edges that were pointed and curved back towards its throat. Even today, every reptile that has this type of teeth is a meat-eater. Reptiles that browse for food, such as the iguana, have low and tiny leaf-shaped teeth used for shredding plants, much like dinosaurs before them did (*Stegosaurus*, *Ankylosaurus* and *Hypsilophodontids*). Animals that graze today, like sheep and horses, have grinding teeth with flat tops to mash tough and fibrous, low-growing plants like grass. The *Hadrosaurus* family of duck-billed dinosaurs had teeth similar to this.

The number of teeth dinosaurs had varied dramatically, depending on the type of dinosaur. Some dinosaurs, like *Ornithomimus* and *Gallimimus*, did not have teeth. On the other end of the spectrum, *Tyrannosaurus rex* had 50 to 60 solid cone-shaped teeth as big as bananas. *Hadrosaurus*, or duck-billed dinosaurs, had the most teeth: up to 960 cheek teeth!

Dinosaur teeth were replaceable. If a dinosaur broke or lost a tooth, another grew in to take the place, behaving much like sharks teeth do today.

Saurischians

Plant-eating sauropod dinosaurs (*Apatosaurus*, *Diplodocus*, *Brachiosaurus*, *Supersaurus* and many more) were equipped with peg-like or spoon-shaped teeth they used for stripping leaves off of plants. These teeth were not used for chewing, however, because of their shape. The plant material that these dinosaurs ate was swallowed and digested in their guts, maybe in fermentation chambers where the materials would break down, often with the help of gastroliths, or stones that the dinosaur swallowed to help break up the leaves and twigs in its gut.

Meat-eating theropods (Tyrannosaurus rex, Carcharodontosaurus, Allosaurus, Gigantosaurus, Spinosaurus and many more) had sharp, pointed teeth they used to tear flesh and sometimes even crush bones. Recently, a Tyrannosaurus rex coprolite (fossilized feces) was discovered containing bits of crushed bone, which tells scientists that the dinosaur did in fact crush its food with his powerful teeth and strong jaws.

Ornithischians

Plant-eating Ornithischians, as well as some prosauropods had varying teeth but many had horny beaks and many leaf-like cheek teeth for nipping and chewing through tough foliage.

Stegosaurids (Kentrosaurus and Stegosaurus as well as others) had leaf-shaped teeth that were built for slicing at weeds that grew close to the ground.

Hadrosaurs (Edmontosaurus, Maiasaura, Lambeosaurus, Parasaurolophus and many more) were duck-billed dinosaurs and had around 960 self-sharpening cheek teeth; the most teeth of all of the dinosaurs.

Iguanodontids (Iguanodon, Probaenodon, and Ouranosaurus among others) had teeth that look similar to today's iguanas. They were rounded outward, notched on top and curved, indicating that perhaps today's iguanas originated as iguanodontids.

Heterodontosaurus was a small dinosaur that had three different types of teeth in addition to a beak. It had sharp upper teeth which it used with its beak to bite and cheek teeth for grinding its food and two pairs of long canine-type teeth that fit into sockets when Heterodontosaurus closed its mouth.

Ceratopsians (Triceratops, Monoclonius and Styracosaurus belonged to this group) had toothless beaks they used to gather food and lots of flat cheek teeth they used to grind and chew tough plant material.

Ankylosaurs (such as Euoplocephalus, Sauropelta and Ankylosaurus) were unable to chew their food so they may have had large fermentation chambers where they were able to digest the tough plant fibers. Ankylosaurs had teeth shaped like a hand with the fingers together. Ornithomimids (like Ansermimus, Gallimimus, Ornithomimus and Struthiomimus) did not have teeth, but they had beaks with which they ate plants and insects and small animals.

<http://www.towncaredental.com/dinosaur-dental-discoveries/>

Are You A New Rockhound?

What to do? -- Have you decided yet? If you're a new rockhound you may be confused by the many phases of our hobby. Do you wonder just, which Earth Science suits you best? Perhaps a little vocational guidance will help you make up your mind...

THE HOARDER:

Are you a hoarder at heart? Are your closet,, attic and basement bulging at the seams with things you just can't bear to part with? If the answer is yes, I suggest you become a MINERAL COLLECTOR. (WARNING—be sure you have at least one empty room before you start, because you won't be able to part with any of your collection and it will grow at an alarming speed.) if you are an apartment dweller, try collecting miniatures, and if your hacienda has only one room to hang your hat, micromounts are the thing for you. If you have a pack-rat personality, you can enjoy collecting beautiful minerals and crystals no matter how limited your space.

THE PERFECTIONIST:

Are you a perfectionist? Do you admire the perfect shape and beautiful color? If so, you're a born LAPIDARY. No lop-sided cabochons for you! They will all come out with perfect contours and you can be sure your cab, will have a mirror-like polish every time.

LIKE NUMBERS?

Are you good at mathematics? Do you have the touch of a gentle breeze? May I suggest you try FACETING? This is one hobby where, a mind with a mathematical flair can whiz through a set of

angles that would baffle a lesser genius. Th. results are probably more spectacular than of any other ‘facets’ of our hobby.

HOW ABOUT VARIETY?

Do you find it hard to stick to one thing for very long? May I suggest NOVELTIES? You can try polishing flats and then use them for pen bases Try cab, and if you tire of them, make a picture out of them. Try a sphere and if you never get beyond the pre-form stage, make it into a paperweight.

Do you think leftovers taste better than the original dish? Thee I suggest TUMBLING for you. Just pick up all the leftover rocks around the house and put them into the tumbler. You’ll be surprised what comes out!

OR, are you like a child on Christmas morning? For you, I suggest FLUORESCENTS. Each time you look over your collection, you will recapture the beauty of a lighted Christmas tree.

Do you keep a diary? Are you fascinated by history and the records of past life on this planet? You are the one to collect FOSSILS. You will find a wonderful pastime and sermons in hones, collecting the remains of these past earthlings.

Seriously, there are so many avenues to explore in the earth sciences. In addition, there’s CARVING, JEWELRY MAKING and WEEKEND FIELD TRIPS, all worth a try! You would be wise to investigate them all until you find one (or several) that suits you best.

HAVE FUN AND GOOD LUCK!

From ESCOMO, 11/87, via BEEHIVE BUZZER 10/01

A Beginner's Vocabulary: Quartz

(Continued from last month)

Last month, we reviewed the many types of quartz from agate through geodes. We continue with:

JASP-AGATE: A combination of jasper and agate. Jasper portions are more fibrous and opaque, and agate portions are translucent.

JASPER: Variegated fine grained, opaque, dense quartz, often colored by iron oxide.

Banded: Multicolored, usually wavy, banded jasper, often planar rather than concentric, and opaque.

Conglomerate: The conglomerate of the lapidary usually consists of small rounded pebbles of quartz materials cemented together by jasper.

Orbicular: The patterns are concentric round eyes in contrasting colors. Opaque. If translucent, it is orbicular agate.

Scenic: There are many variations of scenic or picture jasper found in the West.

Touchstone: This is velvety black.

MORION: Very dark smoky quartz

NOVACULITE: White and extremely fine and uniform in grain. This metamorphosed quartz is a fine abrasive and sharpener.

ONYX: Onyx to the lapidary is straight-banded agate. To the jeweler, it is black dyed chalcedony.

POLYHEDROID: Similar to geodes in that they are mostly hollow, polyhedroids are geometric agates that may have formed as fill-ins between vanished crystals.

ROCK CRYSTAL: The common name for colorless, clear, crypto-crystalline quartz.

ROSE QUARTZ: Pink, rose or rosy-lilac crystalline quartz.

RUTILATED QUARTZ: Needles of the mineral *rutile* penetrate the crystalline quartz. In agate, the needles are called *sagenite*. There are other needle like inclusions in quartz, known by the name of the inclusion, such as *tourmalinated quartz*.

SARD, SARDONYX: Brownish red chalcedony which is called *sardonyx* when straight banded.

SMOKY QUARTZ: Crystalline quartz in some tint or shade of gray, golden brown, brown or near black. Sometimes called *cairngorm*.

THUNDER EGG: Agate-filled nodules of silicified rhyolite.

Words to Live By

Contributed by Wayne Ehlers

- Show me a man with his head held high, and I'll show you a man who can't get used to bifocals.
- The shortest distance between two points is under construction.
- Making a marriage work is like operating a farm--you have to start all over again each morning.
- Government bureau--where they keep the taxpayers' shirts.

Via The Ventura Gem & Mineral Society, Inc. (VGMS)

Upcoming CFMS Gem Shows

- Jun 7-9 LA HABRA, CA.** North Orange County Gem & Min Soc
La Habra Community Center, 101 W. La Habra Blvd.
Hours: Fri 5 - 8; Sat 10 - 8 & Sun 10 - 4
Website: www.nocgms.com
- Jun 8-9 GLENDORA, CA.** Glendora Gems
Goddard Middle School, 859 E. Sierra Madre Avenue
Hours: Sat 10 - 5; Sun 10 - 4
- Jun 29-30 CULVER CITY, CA.** Culver City Rock & Mineral Club
Veterans Memorial Auditorium, 4117 Overland Blvd
Hours: Sat 10 - 6; Sun 10 - 5
Website: culvercityrocks.org [Show Page](#)
- Jun 29-30 ESCONDIDO, CA.** Palomar Gem & Mineral Club
California Center for the Arts, 340 N. Escondido Blvd.
Hours: 10 - 5 daily
- Aug 2-4 NIPOMO, CA.** Orcutt Mineral Society
Nipomo High School, 525 Thompson Avenue
Hours: Fri-Sat 10 - 5, Sun 10 -4
Website: omsinc.org
- Sept 7-8 ARROYO GRANDE, CA.** San Luis Obispo Gem & Min
South County Regional Center, 800 West Branch Street
Hours: 10 - 5 daily
Website: slogem.org [Show Page](#)
- Sept 21 LONG BEACH, CA.** Long Beach Mineral & Gem Soc
Expo Arts Center, 4321 Atlantic Avenue
Hours: 10:00 - 5:00
- Oct 12-13 TRONA, CA.** Searles Lake Gem & Mineral Society
Trona Gem Building, 13337 Main Street
Hours: Sat 7:30 - 5:00; Sun 7:30 - 3:00
Website: iwvisp.com/tronagemclub

WGMS MEETING LOCATION!
Whittier Senior Center
13225 Walnut Street, Whittier



Affiliations



California Federation of Mineralogical Societies
American Federation of Mineralogical Societies
Special Congress Representing Involved Bulletin Editors



Whittier Gem and Mineral Society, Inc.
Post Office Box 865, Whittier, California 90608-0865
Editor: Jay Valle, 1421 Latchford Ave.
Hacienda Heights, CA 91745

Meeting Date: May 27, 2019 at 6:00 PM
Location: Michigan Park
(See page 4 for information)