



# Smoke Signals



**Gem & Mineral Club**

**January 2013**

## Club Activities –

**January 20<sup>th</sup> – Sunday – from noon til 5pm. Workshop at the Moore house. 718 Franklin Ave Davenport, IA 52806. Craig or Kellie 563-445-3034.**

**Due to lack of attendance in the monthly Tuesday night meetings we are going to try to change things up some. The board will be meeting later this month to discuss some options. Among the changes will be more workshop days to give everyone more time to work on their interests, Business meetings only when the need arises, etc. If you would like to add your ideas on how we can make this club more interesting for you please let us know.**

## Dues are Due --

Membership dues for 2013 are due; If you have joined the club September or later in 2012 your dues are already paid. Please make checks payable to BlackHawk Gem and Mineral Club and mail to:

Kellie Moore  
718 Franklin Ave Davenport. IA 52806

- Individuals - \$15.00
- Senior Individual - \$10.00
- Senior Couple - \$12.00
- Family - \$20.00



**To ensure that you are not dropped from the Newsletter roster, please submit your payment before the end of February.**

## Upcoming events:

**March 9-10, 2013 Macomb, IL; 33<sup>rd</sup> Annual Show, Geoland Earth Science Clubs, Student**

Union Ballroom, Western Illinois Univ., Murray St. Sat 10-6, Sun 10-5, Contact George Coursey, 372 Knox Rd 200 N, St. Augustine, IL 61474, 309-368-2947, courseyfarm@gmail.com

March 16-17, 2013 Cedar Rapids: Rock, Mineral and Fossil Show,: Fantastic Fossil Finds of Iowa. Hawkeye Downs Expo Center 4400 6<sup>th</sup> Street SW Cedar Rapids, Iowa Sat. from 8:30 a.m. to 6 p.m., Sun. from 9:30 a.m. to 5:00 p.m.

Featuring special exhibits of many of Iowa's noted fossils from various sources. Also featuring an Asian Tarbosaur and Megalodon Shark jaw, courtesy of Michael & Barbara from Treasures of the Earth, Pennsylvania.

## April - changes to note – the MAPS Expo is moving this year from Macomb to Iowa City.

**April 5-7, 2013, Iowa City, IA.** MAPS Fossil Show. Sharpless Auctions Facility 5049 Herbert Hoover Hwy NE, I-80 Exit 249. Friday 8-5, Sat 8-5, Sun 8-Noon. There will also be a live auction on Sat at 5:15. Contacts: Tom Williams 815-228-5083 [Palleotem234@comcast.com](mailto:Palleotem234@comcast.com), or Steve Holley for tables 309-231-8861 [illfossil@hotmail.com](mailto:illfossil@hotmail.com), or check out their website at [www.midamericapaleo.org](http://www.midamericapaleo.org)

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## Helpful Hint

Before grinding and sanding cabochons, put cold cream on your hands and rub them until they are dry. This fills the pores and cracks in your fingers. When grinding, sawing, or sanding is completed, the dirt can be washed off easily. Good idea for painting also.

Source: The Sooner Rockologist 11/09 via Breccia 10/97 from Napa Gems 12/97 via Beehive Buzzer 1/98.

## Learning Series: Birthstones – January Garnet – The January Birthstone



Photo by R. Weller Cochise College

### Background

Found in the ruins of ancient Greece, Rome and Egypt, garnet jewelry has had a place in history for centuries as a gemstone, talisman or sacred stone. In 1500, Czechoslovakia began a cutting and jewelry industry which remained the largest gem garnet source in the world until the 19th century. The name "garnet" may come from either the Middle English word *gernet* meaning 'dark red', or the Latin *granatus* ("grain"), possibly a reference to the *Punica granatum* ("pomegranate"), a plant with red seeds similar in shape, size, and color to some garnet crystals.

### Common Species – Composition, Chemical Formula, Colors and Sources

**Almandine** – Iron aluminum silicate –  $\text{Fe}_{2+3}\text{Al}_2\text{Si}_3\text{O}_{12}$ : A deep, dark, rich red to purplish red to orange red (the more valuable Almandines are less orange and brown in color). Also known as carbuncle, it is the most common and frequently used gem. Found in Brazil, India, Madagascar, Sri Lanka, U.S. in Arizona, Idaho, New Mexico, Utah, Arkansas and Kentucky.

**Pyrope** – Magnesium aluminum silicate –  $\text{Mg}_3\text{Al}_2\text{Si}_3\text{O}_{12}$ : Deep, dark, rich red to slightly purple red. The only garnet that is always a shade of red, it is often inclusion free and is likely the most famous variety. Pure pyrope is extremely rare and would be colorless (it is allochromatic). Found in Australia, Czechoslovakia, South Africa - Zimbabwe and Mozambique. (Note: The United States produces a highly saturated dark red almandine/pyrope garnet known commercially as Rhodolite.)

**Spessartite** – Manganese aluminum silicate –  $\text{Mn}_3\text{Al}_2\text{Si}_3\text{O}_{12}$ : Medium orange to reddish orange. An uncommon and less well known garnet, it is not often found in the type of quality to use as a gem, although cabochons may be cut from it. Found in Brazil, Namibia, Pakistan, Sri Lanka, US and Europe (mainly in Bavaria, Germany).

**Andradite** – Calcium iron silicate –  $\text{Ca}_3\text{Fe}_{3+2}\text{Si}_3\text{O}_{12}$ :

Demantoid - a medium green to slightly yellowish green. Rare and valuable, it is sought after by gem collectors. Found in Italy, Korea, Russia, Zaire.

Topazolite - golden yellow to greenish-yellow. Found in the Swiss and Italian Alps.

Melanite - black. Once was used as mourning jewelry and in inlay work before the massive use of Onyx and dyed Chalcedony. Found in France, Germany and the island of Elba (Italy).

**Grossular** – Calcium aluminum silicate –  $\text{Ca}_3\text{Al}_2\text{Si}_3\text{O}_{12}$ : Tsavorite - medium, intense green to slightly yellowish green. Rare and valuable. Found in Kenya around the Tsavo National Park area.

Hessonite - varies in color from a brilliant yellow to yellowish brown. Found in Kenya, Sri Lanka.

Essonite - brown or yellowish-brown. Also known as Cinnamon Stone. Found in Sri Lanka, Brazil and California.

**Uvarovite** – Calcium chromium silicate –  $\text{Ca}_3\text{Cr}_2\text{Si}_3\text{O}_{12}$ : Bright green. This green-colored garnet occurs in fine crystal clusters. This form is sometimes referred to as drusy because of the tiny crystals. Occasionally this rare garnet will be faceted into a gem for a collector, but usually, if it is big enough for that it becomes a mineral specimen instead. Found in Russia.

**Note:** Garnets display the greatest variety of color of any mineral and a few even exhibit a color-change phenomenon when viewed in natural and incandescent light. Until the late 1990s—when a discovery was made in Bekily, Madagascar—garnet was said to occur in every color except blue. Garnet makes up two solid solution series: 1. pyrope-almandine-spessartite, and 2. uvarovite-grossular-andradite.

### Identification

**Streak** – colorless

**Hardness** –  $6\frac{1}{2}$  -  $7\frac{1}{2}$

**Crystal Forms and Aggregates** – (Isometric) Occurs in well-formed, distinct, dodecahedral and trapezohedral crystals. Also occurs in compact crystal groupings, grainy, massive, as rounded crystals, and as groups of small crystals.

**Transparency** – transparent to opaque

**Specific Gravity** – 3.5 – 4.3

**Luster** – vitreous to adamantine

**Cleavage** – none, but may exhibit parting

**Fracture** – conchoidal to uneven

**Tenacity** – brittle

**Commonly occurs with** – Mica, Feldspar, Quartz, Calcite, Staurolite, Chlorite, Diopside, Olivine, Hornblende

**Uses** – Garnets have many practical uses. Transparent varieties of cuttable size are faceted for jewelry. The harder garnets are used as an abrasive. —Garnet Paper is a sandpaper favored by cabinetmakers for finishing bare wood. Well formed crystals and interesting aggregates are very popular among mineral collectors.

### Folklore, Legend and Healing Properties

Pyrope Garnet figures in the ancient Talmudic legend which holds that the only light in Noah's Ark was supplied by an enormous red garnet.

The largest documented garnet single crystal was an isometric block measuring 2.3 m and weighing 37.5 tons. Garnets were historically thought to be able to stop bleeding, cure blood disorders and infections, protect against poison, depression and impure thoughts, and provide prosperity. It is said to stimulate the spleen, bloodstream and pituitary gland, and to relieve rheumatism and arthritis pain.

**Trivia**

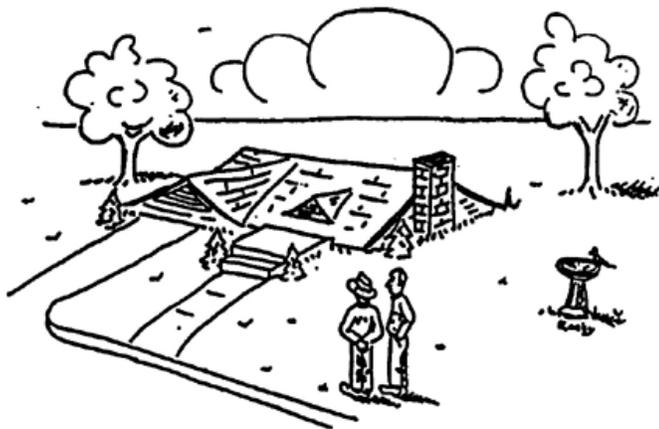
- ❖ It is the state mineral of Connecticut (Almandine) and the state gemstone for New York, Idaho, and Vermont (Grossular – green).
- ❖ It is designated for the 2<sup>nd</sup> and 6<sup>th</sup> wedding anniversary.
- ❖ One of the biblical 12 tribes of Israel used garnet as a symbol.
- ❖ Mixed with very high pressure water, garnet is used to cut steel and other materials in water jets.
- ❖ In Kashmir in 1892, the Hunzas used garnet bullets to fight the British, in the belief that garnets were deadlier than lead.

Sources:

- [http://www.ehow.com/about\\_6121985\\_interesting-garnet.html](http://www.ehow.com/about_6121985_interesting-garnet.html)
- <http://www.bernardine.com/birthstone/garnet.htm>
- <http://minerals.usgs.gov/minerals/pubs/commodity/gemstones/sp14-95/garnet.html>
- <http://www.absoluteastronomy.com/topics/Garnet>
- <http://en.wikipedia.org/wiki/Garnet>
- <http://allaboutgarnets.org/garnet-facts.shtml>
- <http://ezinearticles.com/?Garnet-Mineral-Information&id=393561>
- <http://blog.ice.com/jewelry-advice/january-birthstone-trivia-five-fun-facts-about-garnet/>
- <http://www.glisteningstones.com/garnet-facts.htm>
- [http://www.minsocam.org/ammin/AM66/AM66\\_885.pdf](http://www.minsocam.org/ammin/AM66/AM66_885.pdf)
- <http://www.minerals.net/mineral/silicate/neso/garnet/garnet.htm>

**VIA Rockhounds Herald January 2011**

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***I Knew Ole Rocky Was Getting Too Many Rocks In His Basement!***

by Rocky West in the T-Town Rockhound 7/61  
via Beehive Buzzer 10/98 & others

**Flourite**



**Fluorite – (CaF<sub>2</sub>)** – a calcium fluoride mineral.

The name “fluorite” is derived from the Latin “fluere,” meaning *to flow*, due to its use as a flux. (Note: The term “fluorescence” is derived from

fluorite. The element fluorine also derives its name from fluorite, a major source for the element.)

A member of the isometric crystal system, fluorite is a transparent mineral with a dull, vitreous luster. It is a moderately soft specimen (Mohs – 4.0) with perfect cleavage, brittle tenacity and a splintery, sub-conchoidal fracture. Fluorite streaks white and specimens are available in purple, lilac, golden-yellow, green, colorless, blue, pink, champagne and brown.

It fluoresces in UV light and may also be phosphorescent. Additionally, it may be thermoluminescent or triboluminescent, and will melt at 1360°. Fluorite is slightly soluble in hot hydrochloric acid and it decomposes in sulphuric acid. Collectors should be aware that some specimens are light sensitive.

Fluorite is found as a common gangue mineral in hydrothermal veins—especially those containing lead and zinc minerals—and in some greisens, granites, and pegmatites. As a component of some marbles and other metamorphic rocks, it is often associated with the minerals calcite, dolomite, barite, sphalerite, cassiterite, quartz, gypsum, and especially lead and silver.

In Alabama, fluorite is most often found in veins and cavities in limestone and dolomite rocks of the Paleozoic region.

Fluorite has numerous uses, but large quantities are used as a flux in the manufacture of steel and aluminum, in the preparation of hydrofluoric acid, and in optical instruments.

**VIA Rockhounds Herald Feb 2012**

## Tips from Phil Oliver

### LAKE SUPERIOR AGATE — WHAT IT'S WORTH

The current wholesale market starts from about 50¢ per pound for tumbling grade up to over \$ 1000 per pound for the better agates. One needs a method to figure their value. I use 7 different categories; assign a number value to each number and then calculate their product. The following are the different categories and methods for assigning values.

#### 1. Weight in ounces (larger agates are worth more so the bigger ones are given bonus points)

- ☐ Over 6 oz = the weight + 2
- ☐ 12 oz = the weight + 4
- ☐ 16 oz = the weight + 8
- ☐ 32 oz = the weight + 16
- ☐ 48 oz = the weight + 32
- ☐ 64 oz = the weight +64

#### 2. Contrast in color

- ☐ None = 0.125
- ☐ Poor = 0.250
- ☐ Ave. = 0.5
- ☐ Good = 1.00
- ☐ Super = 2.0

#### 3. Surface condition

- ☐ Cut & polished = 0.5
- ☐ Tumble polished = 0.75
- ☐ Face polished = 1.0
- ☐ No polish = 1.5

#### 4. Quartz

- ☐ >75 % = 0.25
- ☐ >50% = 0.5
- ☐ >25% = 0.75
- ☐ Trace = 1.5
- ☐ None = 2.5

#### 5. Fractures

- ☐ Many = 0.125
- ☐ Few = 0.5
- ☐ Few none in pattern = 1
- ☐ none = 2.5

#### 6. Color

- ☐ Light (gray/white/tan) = 0.25
- ☐ Dark = 0.25
- ☐ Paint (single color) = 0.75
- ☐ Multi colored = 1.5
- ☐ Red & white = 3.0

#### 7. Patterns

- ☐ Cloud = 0.125
- ☐ Moss = 0.25
- ☐ Ruin/breccia = 0.75
- ☐ Irregular plumes = 1.0
- ☐ Tubes (diaptratic) = 1.0
- ☐ Plumes = 1.5
- ☐ Vermicular (worm like tubes) = 1.5
- ☐ Vein (straight bands) = 2.0
- ☐ Circular bands = 2.0
- ☐ Tubes = 2.0
- ☐ Water level = 2.0
- ☐ Fortification = 3.0
- ☐ Eye = 5.0

**Practice Using the Lake Superior Rating System**  
Take the following 8.4 oz laker depicted:



- ☐ Weight = 8.4 + 2 = 10.4
- ☐ Contrast = good = 1.0
- ☐ Surface condition = face polished = 1.0
- ☐ Quartz = none = 2.5
- ☐ Fractures = few = 0.5
- ☐ Color = multi-colored = 1.5
- ☐ Pattern = circular bands = 2.0
- ☐ Product = 10.4 × 1 × 1 × 2.5 × 0.5 × 1.5 × 2 = 39

**A reasonable price for this agate would be about \$40.00**

VIA Cedar Valley Gems Sept 2012 Volume 39 Issue 1

## Bench Tips by Brad Smith

### ADJUSTABLE CHUCK FOR DREMELS

Many of us have a Dremel motor tool to use at home or when out to a class or workshop. The one thing that makes this tool much more productive is the addition of one inexpensive option, an adjustable chuck.

The basic motor tool as sold typically comes with a collet chuck. This means you have to use a wrench to change every tool bit, you have to switch collets to use different shaft sizes (3/32 or 1/8 inch bits), and you can't use ordinary drills at all - only the special ones that have a 3/32 shaft.

A simple and inexpensive (\$10) adjustable chuck solves all of this. It's available in most large local hardware stores or model making outlets. Tightening the chuck is done easily by hand to any size shaft. No key is required.

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### AVOIDING SOLDER LINES

After finishing a soldered joint on say a bezel, have you ever seen it reappear when you solder the bezel to a base plate? What's happening is that every time you heat a soldered piece to the temperature that solder flows, the liquid solder dissolves a little bit more into the base metal. This leaves a small furrow where the solder had been sanded off flush at the joint. To get rid of the furrow, you have to re-sand the joint area down to the bottom of the furrow.

To avoid this when I have another soldering operation to follow, I try to leave a little extra solder on my joints. For instance, when trimming off excess base plate from around a bezel, I leave a paper thickness of excess plate material whenever possible until I'm done with all soldering.

Of course, this isn't always possible as when a soldering operation will prevent you from gaining access to an area for final sanding and polishing. In that case I coat the finished solder joint with ochre to prevent a furrow.

## DRAGON CROSSBOW

It's always fun to make something that's functional. Sometimes it's a handle for your favorite hammer, other times it's a custom stamp or punch for special task, but if you're heading out to slay a dragon, you might need a cross-bow. Here's how Hans Meevis built his Dragon Bow:

<http://ganoksin.com/blog/meevis/2012/07/12/the-dragon-bow-start-to-finish/>

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Acknowledgement to be included with each publication:

More Bench Tips by Brad Smith are at [facebook.com/BenchTips/](https://www.facebook.com/BenchTips/) or see

"Bench Tips for Jewelry Making" on Amazon

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## Fire Obsidian - Author Unknown

Did you know that chunk of black obsidian you have just might have gold sheen, fire, or moon glow in it if you orient it correctly? Take it out into the sunshine and try to locate a good spot that shows something more than just black. If your piece has a rind or skin on it, take a small chip off here and there. Then wet the piece and turn it slowly in all directions so that the sun will reflect any unusual coloring. If you are fortunate enough to find color, orient it by using the Sinkankas method (single light bulb over your head so the light just grazes your forehead). Mark your piece and saw it. Check before sawing each time to make sure that you are keeping the color on top. Fire obsidian can be so colorful that you will think you are looking at black opal.

- from G.L. Nugget Apr2001, via theRock Collector Dec)3 via The Calgary Lapidary Journal Feb04

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### HINT ON OBSIDIAN:

When grinding and sanding Obsidian, always grind from the center out, otherwise the wheel and sanding belts will pick up tiny chips of glass that will scratch your stone.

(from Contact Zone via Gneiss Times 2/98) via News & Views 3/98

# Tooth Truth

I was walking through the wood this summer between Reserve and Apache Creek, NM when I stumbled upon an elk skull. I showed it to a knowing friend who asked me if I was going to take the ivory. I gave her the "cow looking at the new gate look" and said "what?"



She then explained to me that the first two canine type teeth on the upper jaw are actually ivory. They sure did not look like ivory; they looked like, well teeth. The usually develop of bulls and cows 7 years and older.

Back in civilization, I learned that these teeth are also called "buglers or eye teeth". They were prized by American Indians for their spiritual value. They were given at birth to male Lakota's to promote long life since it was seen that the teeth were the last thing to rot of an elk. They have been found in digs at sites going Back 5000 years.



In the 1800's the whole ivory trade was so popular, that the elk were being taken just for their ivory so much so that Teddy Roosevelt banned the practice.

The ivories are polished and mounted in rings and all sort of jewelry. They're popular jewelry with the B.O.P.E. the Benevolent and Protective Order of Elks. You never know what you can learn out there in the woods till you trip over it.



VIA THE VOICE

VOLUME LXII NUMBER 10 October 2012  
NEWSLETTER OF THE EL PASO MINERAL AND GEM SOCIETY

## Fossil Fakes

by Brad Smith, via PLS Rambling

We all know there's a lot of fakes on the market these days - fake beads, fake gemstones, fake metals and fake fossils. I've bought turquoise beads that turned out to be dyed white rock, and my students have bought silver jump rings that can be picked up with a magnet. But we're not the only ones who get deceived by fakes. You can't assume that dealers are the problem. Many who sell these fakes are unaware they're bogus. They've been ripped off by their own sources. The problem is two-fold. The fakes are getting very good and few people have enough training to spot the deception. If you're into fossils, I tripped across a web site that lets you read up on clues for how to spot "enhancement", or outright faking. Some of the techniques used to create these fakes are quite novel!

<http://www.paleodirect.com/fake-fossils1.htm>

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## Still Think It's Jade?

Lapidaries and jewelers should constantly attempt to call gemstones and rough materials by their correct names. The term jade is applied to many non-jade stones, such as: Korean jade is bowenite, a hard variety of serpentine; Transvaal jade is a massive variety of green, grossular garnet; Amazon jade is aventurine; American jade is a rock - a mixture of idocrase and grossular; Australian jade is chrysoprase; Colorado jade is green microcline; Jasper jade is green jasper; Flukien, Manchurian and Honan jades are all soapstone; Mexican jade is green-dyed marble or calcite; Oregon jade is dark green jasper; Silver peak jade is malachite. It would be clearer to beginners if jade were called jade, malachite called malachite, aventurine called aventurine.

VIA: *Arkansas Rockhound News* January 2011, *From Carmel Valley Prospector Via Gravel Gazette* 10/01

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## DID YOU KNOW?

Chromium is the color determinant for both rubies and emeralds. As a chemical impurity, chromium causes rubies to be red and emeralds to be green. A small amount, co-mingled with the differently spaced atoms of the two gems, causes them to absorb different wave lengths of light. In ruby, green waves are absorbed; in emerald (beryl) red waves are absorbed. The color seen is leftover wavelengths - green in emerald, red in ruby.

*Port Townsend Rock Club News* 10/2001

# SOME AGATE FACTS: WHAT IS AN AGATE?

Agates are semi-precious gemstones that are a variegated form of chalcedony (pronounced kal sed'-nee), which is silicon dioxide in the form of microscopic fibrous quartz crystals. Agates naturally develop when an empty pocket inside a host rock fills in molecule-by-molecule, layer-by-layer as these microcrystals self organize to form concentric bands or other patterns. The colors and arrangement of the microcrystals are influenced by changes in pressure, temperature, and mineral content that occur during the formation process. Unlike other gemstones, each agate is unique. Even slabs cut from the same specimen will vary in color and design.

## HOW DO AGATES FORM?

Agates develop as secondary deposits in hollow cavities, called vesicles. Although they can form in all types of host rock, most of the world's agates developed in ancient volcanic lava. When the continents were first forming, layers of molten lava pushed toward the earth's surface through rift zone cracks, volcanoes, and other geologic events. Within the lava, there were pockets of trapped gases.

Later, these gases escaped through cracks that formed as the igneous rock cooled and hardened, leaving hollow cavities. Other cracks and seams also formed when adjoining sections of lava cooled at different rates.

These empty cavities and seams filled with fluids rich in dissolved and suspended quartz molecules (silica), as well as other mineral impurities. When the silica concentration became supersaturated, it developed a gelatin-like consistency either throughout the pocket or in a layer that served as the active crystallization front. Over time, the silica molecules began to form miniature fibrous microcrystals that attached to the sides of the cavity or seam.

During the filling-in process other mineral impurities collected at the inside of the chalcedony silica band, forming intervening and often contrasting bands. This pattern repeated until the entire vesicle was filled in, or until all

the silica rich solution was used up. If there was the proper balance of silica and mineral impurities, then the entire cavity filled with alternating bands. If there was an insufficient quantity of mineral impurity or if the pressures and temperatures changed, the cavity completed filling in with microcrystalline quartz, or another form of silica.

## AGATE CHARACTERISTICS

**Composition:** SiO<sub>2</sub>

**Hardness:** 6.5 to 7

**Specific Gravity:** 2.4 to 2.7

**Refractive Index:** 1.530-1.540

**Fracture:** Conchoidal

**Crystal Formation:** Cryptocrystalline

**Color:** Varies including gray, blue, yellow, brown, black, white, and green.

**Translucency:** Varies from extremely translucent to opaque

**Streak:** White

**Formation Temperature:** 122 to 572 F  
(50 to 300 C)

**Tests:** Insoluble, unless placed in hydrofluoric acid

**Luster:** Waxy

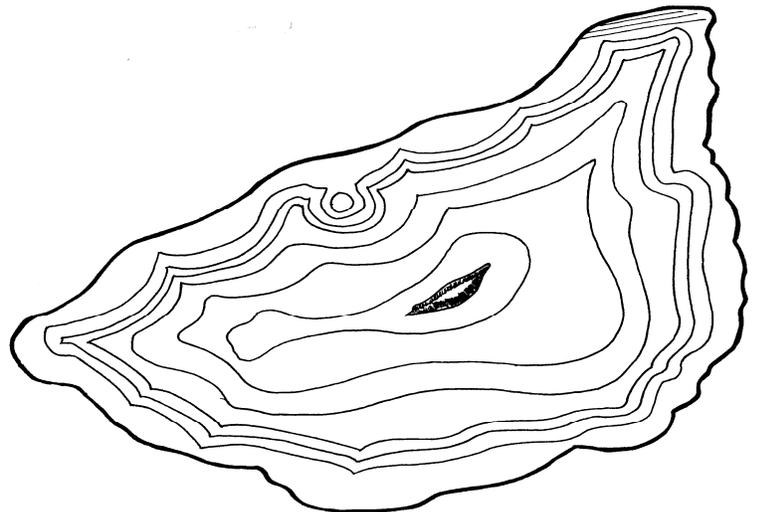
**Porous:** Yes

**Melting Point:** 1,600 degrees C (2,912 degrees F)91

INFORMATION FROM: [www.theagatelady.com](http://www.theagatelady.com)

Via Gem City Rock News March 2012, VIA Volume XXXVII

Issue No. VI11 Pica Pick April 2012



## Know Your Metals

When you first get into Metal Smithing, Wire Wrapping, or Beading, the type of metal you work with is important. The sheer abundance of what is out there can be daunting. In Wire Wrapping for example, you normally work with a square wire for holding the stone, and half round to bind the square wires together. That seems simple enough. Next you have to decide what gauge wire you will work with: commonly 20 to 22 gauge square for a larger stone, and 24 to 26 gauge square for a smaller stone. Note here that the item you are wrapping does not have to be a rock. You can wire wrap anything. But, as we are Rock Hounds, I will refer to a stone. Now you will need the half round to bind the square wires together. Usually, the gauge of the half round is the same as the square wire you use. But, for visual effect you can choose to go larger or smaller.

After all that, now you must decide on what metal you will use. Silver or Gold? This also seems pretty straight forward, until they start throwing in all the different names and composition formulas. Jeweler's Gold, Merlin's Gold, Nordic Gold, Prince Rupert's Metal, and Red Brass are just that: Brass. Most commonly the formula is 75% to 85% copper, with 15% to 25% zinc, and sometimes a trace amount of tin. The result is a beautiful yellow color that imitates gold. However, there is no gold to be found. The different formulas contribute to the workability, the color, the melting point, tarnish resistance, and other attributes that are attractive to people.

**(FFTK&T: the copper in brass makes brass germicidal, via the oligodynamic effect, for example, brass doorknobs disinfect themselves of many bacteria within eight hours. This effect is important in hospitals, and useful in many contexts.)**

The price of brass is considerably less than gold which makes it attractive to those practicing their metal art. But, care should be taken that the finished item is not sold to the consumer under the misnomer that it is actually gold. The same holds true for silver. There is a variety of metal that bears the name silver: German Silver, Nickel Silver, and Alpaca Silver are some. Nickel silver has recently been used to produce counterfeit coins and medallions. More outright attempts at nickel silver fraud include the production of replica bullion bars marked "Nickel Silver" or "German Silver", in weights of one troy ounce, that are sold without explanation that there is no elemental Silver present.

Nickel Silver is an alloy of copper, zinc, and nickel, often in the proportions 5:2:2. It closely resembles silver and is used in cutlery, as a base for silver-plated wire, and as a practice wire for wire wrapping. Recently, prompted by the economy, the lower price of these pseudo-silver products, their workability or anti-tarnish attributes, many have begun to incorporate not only Nickel, but Aluminum and Stainless Steel into their crafts. This is all fine, and I have seen some beautiful things using these different metals, as long as there is no attempt to trick the consumer.

When you are looking for metals, whether in a catalog or online, reputable wholesale companies will have the formulas stated so that you know what you are getting. If you should run across a low price for silver or gold, and no formula is given, there is a good chance that it is not what you expect. If you are making jewelry to sell to the public, you have a responsibility to know what you are using and present it accordingly.

VIA Little Gems Volume 4 Issue 1 January 2011

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## A Rock By Any Other Name...

**Leaverite:** Also known as Dropite, Junkite and Crudite. This type of rock should be discarded immediately. 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.

*VIA Arkansas Rockhound News November 2011, From Rock Chip Reporter, FarWest Lapidary & Gem Society, Coos Bay, OR (Feb. 2004); via Gems from the Redwoods and Gem Time.]*

## 2013 Officers and Directors

President	Kellie Moore	(563) 445-3034
Vice President	Craig Moore	(563) 445-3034
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Secretary	Diane Preslar	(309) 786-1523
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Director (2-year)	Brett Henderson	(309) 626.0107
Director (1-year)	Lori Johnson	(563) 299-5516

## Committee Chairpersons

Membership	Kellie Moore	(563) 445-3034
Publicity	Craig Moore	(563) 445-3034
Youth Group	Vacant	
Rock Show Chair	Kellie Moore	(563) 445-3034
Rock Show Co-Chair	Craig Moore	(563) 445-3034
Scholarship	Board of Directors	(563) 445-3034
Bulletin Editor	Kellie Moore	(563) 445-3034
MWF Liaison	Vacant	

The purpose of this non-profit organization is to promote interest in collecting, studying and working with gems and minerals and fossils. Organized in 1955, the Black Hawk Club joined the Midwest Federation of Mineralogical & Geological Societies in 1959. It is also a member of the American Federation of Mineralogical Societies. Meetings are held on the third Tuesday of every month, September through May at 6:00P.M. in the Hauberg Civic Center, 1300 24th Street, Rock Island, IL. Picnics are held at various locations during June, July, and August. Annual Dues: Individual Membership: \$15.00, Senior Couples: \$12.00, Senior Individual: \$10.00, Family: \$20.00.

### Newsletter Submissions:

Please send submissions for publication (announcements, photographs, notes, letters, articles, etc.) in the Smoke Signals newsletter to the Editor no later than the first day of the previous month. For example, August 1 for the September issue. Advance items are appreciated. Material may be e-mailed to Kellie Moore at kalsinean1@aol.com, or submitted via the U.S. Mail:

**Kellie Moore**  
**718 Franklin Ave**  
**Davenport, IA 52806**

If e-mailing an article, it may be included within the body of the e-mail message or sent as an attachment.

Copyrighted material submitted for publication must be accompanied by a written release from the copyright holder. All material submitted is subject to editing. No anonymous submissions will be considered; however, the submitter's name will be withheld or a pseudonym may be used at the submitter's request. The deadline for all submitted work is the 20th of the month before it is to be published. Late and/or unused entries may be published in later issue.

**Looking forward to receiving an article from you!**

**Editor:** Kellie Moore 718 Franklin Ave, Davenport, IA 52806.

**Disclaimer:** The conclusions and opinions expressed in *Smoke Signals* are those of the authors and do not necessarily represent those of the Officers, Editor, or members of the club.

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Affiliations

Midwest Federation of Mineralogical & Geological Societies

<http://www.amfed.org/mwf/>

American Federation of Mineralogical Societies

<http://www.gaminal.org/afms.htm>

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**Blackhawk Gem & Mineral Club  
Kellie Moore  
718 Franklin Ave  
Davenport, IA 52806**

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