

WHITTIER

ROCKHOUNDER
GEM & MINERAL
SOCIETY

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Special Summer Edition
No Meeting in August
See inside for Summer Events



Tony Fender receiving AFMS award for beading

Whittier Gem & Mineral Society
Elected Officers and Committee Chairmen

2016-17 Elected Officers

President: Jerry Turner

1st Vice President:... Frank Winn..... (Rkhndfw@gmail.com) (626) 912-0404

2nd Vice President: .. Art Ragazzi

Treasurer: Jay Valle..... (res19pnb@verizon.net)..... (626) 934-9764

Secretary: Yvonne Morton .

Federation Director: Tony Fender.....

Directors: Joe Goetz (joenmar1@verizon.net) (626) 914-5030

..... Marcia Goetz (joenmar1@verizon.net) (626) 914-5030

..... Kathy Valle.....

Appointed Chairmen

Budget/Finance:

Bulletin Editor: Jay Valle..... (res19pnb@verizon.net)..... (626) 934-9764

Bylaws & Rules Jerry Turner.....

Claim Secretary: Art Ragazzi

Community Kathleen Turner.....

Relations:

Displays:

Door Prizes: Loretta Ogden.....

Field Trips:..... Joe Goetz..... (joenmar1@verizon.net) (626) 914-5030

Librarian:

Rockgabbers: Tony Fender

Show Chairman:..... Frank Winn..... (Rkhndfw@gmail.com) (626) 912-0404

Social Secretary: Kathy Valle (bunnie1962@yahoo.com).... (626) 934-9764

Regular Monthly Meetings: 7:30 PM 4th Thursday each month, 3rd Thursday in November & December. No regular meetings in July & August. See Map on cover 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

ROCKHOUNDER

THE PREZ SEZ:

No President's Message for this month.

Nipomo Fieldtrip Opportunity Aug. 6th & 7th, 2016

The fieldtrip for August is to the Orcutt annual show. Unfortunately the fieldtrip leader/ chair said there is no club guided fieldtrip to collect Nipomo agate, so don't go onto the farm land with the idea of collecting without having written permission to do so.

However there is the show to see and you could find your way to the beach to cool off, who knows what you'll possibly find there. But most of all have fun and a great steak dinner at Jockos steakhouse. And finally be safe out there!!!!



**Somewhere in Cali
Joe Goetz**

WGMS Summer Vacation

No August General Meeting

Next regular meeting will be September 22!

Just a reminder, the Whittier Gem & Mineral Society goes “dark” during the usually hot summer months of July and August. We will restart our regular meetings and field trips in September.

So continue to enjoy your summer.

The History of African Trade Beads

Trade beads, also called slave beads, were decorative beads used between the sixteenth and the twentieth century as currency. African trade beads are trade beads given to Africans in exchange for slaves, goods, and services. The goods included ivory, gold, palm oil, and other items the Europeans wanted.

These beads were made to make the passage of Europeans in Africa easy. Venice was the major producer of these beads. These beads did not have a set design. Rather, they were produced according to the demand of the person commissioning them. These beads were handmade and no two were the same. Other African trade beads were made in India and transported to West Africa by Arab traders through North Africa. Note that the name African trade beads is also used for a particular type of trade beads made in Venice, the Millefiori or thousand flower beads.

African trade beads were successfully used because Africans place high intrinsic value on decorative items. They had not seen such items before and they were easily impressed. The Africans

used the beads as currency, as a store of wealth, to beautify themselves, and as a sign of social status.

Many of these beads have survived over the years. However, you should note that they are worn and if you are looking for clean and perfect beads these are not the beads for you. These beads are usually bought by those who appreciate the history behind them and collectors. Today, African trade beads are used to make earrings, necklaces, and other jewels.

African trade beads increase in value each year. This has been fueled by a better understanding of their history and the use of the internet. The internet makes it possible for collectors to showcase their beads to millions of people conveniently, cheaply, and anonymously.

Buying African Trade Beads -Checking for Authenticity

There are many unscrupulous people claiming to sell African trade beads. To avoid getting scammed, you should do research on what these trade beads look like. If you get beads that are not worn, you should know that these are not genuine. The best place to buy genuine African trade beads is from a trusted site. If possible, have a jewel expert look at it before making a purchase. You should be particularly careful when buying from a website because it is hard to trace the seller if you discover you have been conned. You should consider asking for recommendations from someone who has bought authentic African trade beads before.

Personal preference and use

The authenticity of the African trade beads is not the only thing to consider when buying the beads. Consider the purpose of the pur-

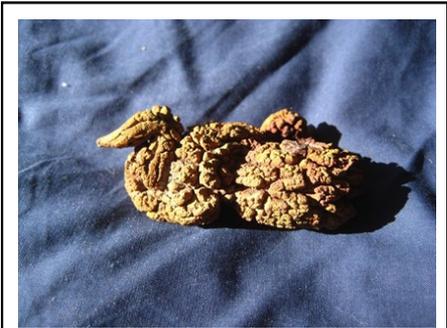
(Continued on page 8)

COPROLITE FOSSILS

Coprolites form in much the same way as any other fossil - the original organic material is infused with water containing dissolved minerals, and as the minerals crystallize, the original material is slowly replaced by stone.

Most people, when handed a coprolite for the first time, go and sniff it as their first impulse. But it smells of nothing but stone, because that's all it is now, technically speaking.

Coprolites are at a disadvantage from the start in the fossil-forming process. Generally speaking, the quicker to decay an object is, the less likely it is to successfully fossilize. Fossilization takes time, and if the whole thing rots before it can finished, well, no fossil [1]. That's why hard and durable objects, such as bones and teeth, are much more common fossils than soft tissues, or coprolites.



Coprolite from Madagascar, presumed to have been left by a giant turtle.

Coprolites were first identified as what they actually are, by a woman named Mary Anning (21 May 1799 – 9 March 1847). Mary Anning was a fossil collector and paleontologist from southern England, and noticed these odd stones inside the abdominal areas of the ichthyosaur fossils she was collecting. When she broke them open, she noticed they had fragments of fossilized fish bones and scales. .

In 1829, Anning's observations led a geologist named William Buckland to propose that these stones were the digested remnants of the dinosaurs' last meals, and he gave them the name of coprolites.

Those fossil fragments inside coprolites contain a wealth of scientific information, for anyone who really wants to look closely. The kinds of fossils contained in the coprolite can tell us a lot about the environment the creature was living in, by what it found in the area to eat. It also reveals the creature's preferred food sources, such as whether it was an herbivore or a carnivore, and sometimes it will even reveal what parasites plagued its creator. And, yes, we

learn a lot about its intestinal systems. That's pretty much a given.

The challenge, of course, is in determining exactly *which* species of creature left a particular coprolite behind. In some cases, when there are a lot of fossilized remains of a particular animal around, it's easy to make a good guess. And in some cases, as with Mary Anning's fossils, the coprolites were petrified while still within the animal's body. But with a more isolated coprolite specimen, it can be very difficult.

Early human settlements left the occasional coprolite as well, so they have archaeological value as well as geological value. As it turns out, we can learn about our own history from them. A human coprolite found in a cave in Oregon revealed the existence of a long-lost 13,000-year-old society [2].

And a research team from the University of Colorado, studying an ancient Anansi settlement in Colorado known as Cowboy Wash, uncovered human remains showing what they believed to be evidence of cannibalism. They tested a coprolite found nearby, and discovered it contained a protein only found in human muscle tissue, confirming their theory [3].

Oddly enough, coprolites from dinosaurs and other prehistoric beasts are often used in jewelry. Due to the mineralization, many of them have bright and beautiful coloration. And, well, you get a great answer to give when someone says, "Ooh, what a pretty necklace! What stone is that?"

Some people may think coprolites are disgusting, but like any other fossil, they're also windows into a lost and wondrous past on this planet.

Sources:

[1] <http://discovermagazine.com/1996/jun/whattthedinosaurs786>

[2] <http://www.foxnews.com/scitech/2012/07/12/fossilized-human-feces-hints-at-long-lost-13500-year-old-west-coast-culture/>

[3] <http://www.smithsonianmag.com/people-places/anasazi.html?c=y&story=fullstory>

via Rockhound Times article at
<http://www.rockhoundtimes.com/coprolites.html>

The History of African Trade Beads

(Continued from page 5)

chase. This means if you are buying the beads to wear them, you should find beads that are appealing. In this case, the age and the history is inconsequential only the quality. However, if you are buying the beads as a collector, this does not really matter - what matters is their age and their history. You should consider your personal preference because what attracts one person is not guaranteed to attract the other. You will be spending a lot of money on the beads and you should therefore buy something that makes you happy.

The Source

It is important that you consider the source. You can buy the beads from normal mortar and brick stores or from the internet. Each option has pros and cons that you should weigh against each other. The internet is convenient since you can make a purchase 24/7, all year round and because you can do this at your own home, it is cheap because there are many companies in competition and they have to lower their prices to attract and retain clients, it is anonymous since all transactions are done online, and you get to choose from many options, meaning the chances of getting the beads you want are very high. However, buying online exposes you to a risk of internet fraud and you cannot accurately tell the quality of the beads just by looking at pictures. You also have to give time for shipping.

On the other hand, when you buy from a normal brick and mortar store, you get to see and feel the beads, meaning you will be sure of what you are buying and there is little risk of getting scammed. You also get the beads immediately after purchase. However, you are likely to pay more and you only get to look at the stores near you, meaning you can fail to get what you want.

What Is a Bead?

A bead is any object that can be strung to adorn or decorate a person, thing, or place. From early beginnings people have worn beads to proclaim their identity, status, and kinship; to bedazzle others and to please themselves. Beads have been used to tally property, pay for goods, and record events.

Beads invoke protection and well-being. They declare power and wealth. They tell of those who make them, wear them, pray, pledge, love, mourn, and celebrate with them.

Our fundamental human needs have found expression through beads. They reflect the history of Earth's people and continue to be a part of our lives.

Via BC Rockhounder – Summer 20011

Can that really be TRUE???

Do you know what gives tofu its firmness?

The answer... GYPSUM! Calcium sulfate (gypsum) is the traditional and most widely used coagulant to produce Chinese-style tofu. Some manufacturers even use this to advertise tofu as a good source of calcium!

So... does that mean I can use an extra chunk of drywall to firm up my too soft tofu? Better that than a prized Gypsum Rose!

Arkansas Rockhound News, 9/14

Rockgabbers Update

Our next Rockgabbers will be October 1st at 1 pm. Ideas welcome and will show project at the September Meeting. **Sandie**

How to find the fire in Fire Agate

Fire agate is a quartz-based rock with layers of iron oxide in chalcedony which results in iridescence. It occurs in nodules of milky or grayish translucent chalcedony. Sometimes it is found in botryoidal growths in geodes and in chalcedony roses. Fire agate appears as a dull, reddish brown layer, but when the surface layers are removed the rainbow colors or iridescence are exposed. The fire is brought out by tumbling, trimming, and grinding off the outer layers to expose the iridescence. Polishing magnifies the fire.

To find the fire, remove the matrix, then tumble polish the stones. Tumbling removes the excess chalcedony. When polished, remove excess stone around the edges, then polish and set. Allow the stone to retain its irregular shape and polish slowly, so you don't go through the fire layers. The graceful natural shapes are superior to those cut to calibrated sizes, as the best fire doesn't always fit a mold.

To set it off, mount the fire agate in a custom-made gold or silver setting. Fire agates are most often found in Arizona, California, Idaho and Mexico, among other locales.

From Gems of the Rogue, 5/08 via Oregon Coast Agate Club, Feb/Mar 2013

Additional article about: Fire Agates of Arizona

At first glance Fire Agates are not impressive. They appear as a reddish-brown rock covered with a coat of chalcedony. When this covering is removed and the stone is polished, there is a burst of rainbow colors. The glowing reds, yellows, oranges, blues, purples and greens are responsible for the "Fire Agate".

The cause of the fire is still a puzzle. Some collectors attribute the iridescence to the presence of minute plated crystals of goethite sprinkled with layers of chalcedony.

There is a difference between the Fire Opals and Fire Agate. In the Opal, the fire comes from long chains of spherical quartz molecules that reflect light. The fire in the agate is due to a buildup of alternating layers of quartz and limonite, an oxide of iron. Stress patterns that develop between the layers cause the light to refract, thus producing the rainbow colors.

The Fire Agate is rare and the play of color under the chalcedony places it in the gem class. It is about seven in hardness on the Mohs scale which makes it suitable for gemstones. Unlike Opal, it does not crack, lose its color and is not affected by moisture or lack of proper care.

From Rock Chip Reporter, 8/04 & others, via Oregon Coast Agate Club, Feb/Mar 2013

August - Peridot or Sardonyx

August's birthstone, the peridot, symbolizes strength. It is sometimes called the evening emerald for its light green color. It was once believed that the green peridot crystals found in volcanic ashes were the tears of the volcano goddess, Pele. When set in gold, this gem was said to protect the wearer from nightmares.

Sardonyx is a form of onyx and is recognized by its layers of reddish brown and white banding. It was popular with the ancient Greeks and Romans who carried into battle talismans of sardonyx engraved with images of heroes such as Mars or Hercules, believing that this would bring courage and victory.

Because of its attractive banding, sardonyx has long been used to fashion cameos (carved raised figures) and intaglios (the reverse of cameos).

Via Solano Chieftain, Summer 2014

Hiking Essentials for Safety

Taking just a few minutes to plan and prepare can turn a simple outing into a wonderful outing.

- Always let someone know where you will be hiking.
- Best to go with a hiking partner or a group.
- Check weather conditions prior to going.
- Take plenty of water and snacks.
- First Aid kit -band aids, gloves, hand sanitizer or a package of wipes.
- If diabetic or other medical condition take into consideration timing of medication, food and activity. Special consideration for diabetic or asthma: carry rescue glucose tablets for low blood sugar and emergency inhaler for asthma attack.
- Know your and your travel partners limitations.
- Take your mobile phone but do not rely on it 100%. Be aware of your surroundings and know your limitations.
- A good idea is to have a card in an all-weather case with any and all medical problems you may have and also what medications you are taking either on your person or attached to your backpack or message bag.

Via Picken's and Diggin's, 5/11

**Lava Fingerprinting Reveals Differences
between Hawaii's Twin Volcanoes**

Science Centric – 2 December 2011

Hawaii's main volcano chains – the Loa and Kea trends – have distinct sources of magma and unique plumbing systems connecting them to the Earth's deep mantle, according to University of British Columbia (UBC) research published this week in Nature Geoscience, in conjunction with researchers at the universities of Hawaii and Massachusetts.

This study is the first to conclusively relate geochemical differences in surface lava rocks from both chains to differences in their deep mantle sources, 2,800 kilometres below the Earth's surface, at the core–mantle boundary.

‘We now know that by studying oceanic island lavas we can approach the composition of the Earth's mantle, which represents 80 per cent of the Earth's volume and is obviously not directly accessible,’ says Dominique Weis, Canada Research Chair in the Geochemistry of the Earth's Mantle and Director of UBC's Pacific Centre for Isotopic and Geochemical Research.

‘It also implies that mantle plumes indeed bring material from the deep mantle to the surface and are a crucial means of heat and material transport to the surface.’

The results of this study also suggest that a recent dramatic increase in Hawaiian volcanism, as expressed by the existence of the Hawaiian islands and the giant Mauna Loa and Mauna Kea volcanoes (which are higher than Mount Everest when measured from their underwater base) is related to a shift in the composition and structure of the source region of the Hawaiian mantle plume. Thus, this work shows, for the first time, that the chemistry of hotspot lavas is a novel and elegant probe of deep earth evolution.

Weis and UBC colleagues Mark Jellinek and James Scoates made the connection by fingerprinting samples of Hawaiian island lavas – generated over the course of five million years – by isotopic analyses. The research included collecting 120 new samples from Mauna Loa – ‘the largest volcano on Earth’ emphasizes co-author and University of Massachusetts professor Michael Rhodes.

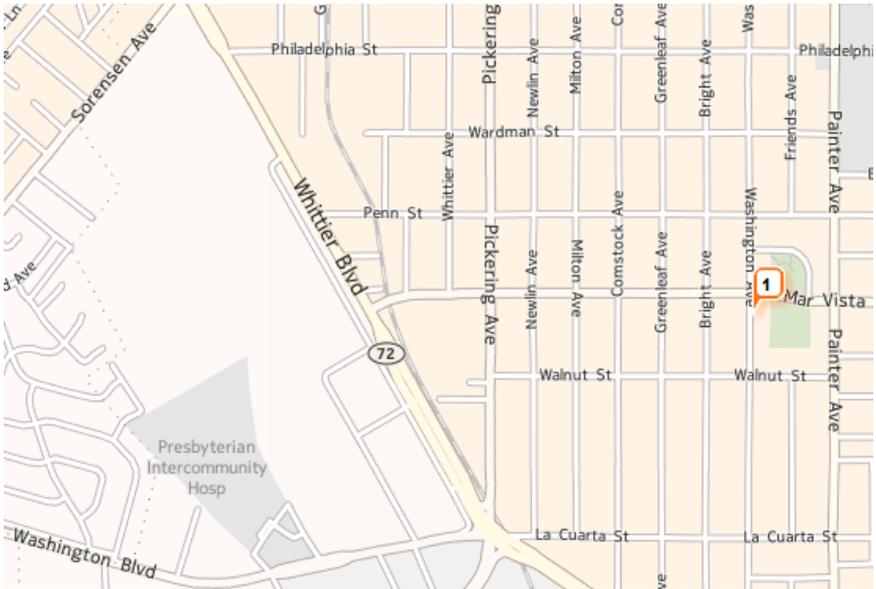
Source: University of British Columbia

Via Nickel Basin Rockhound, 6/12

Upcoming CFMS Gem Shows

- Aug 5-7** **NIPOMO, CA.** Orcutt Mineral Society
Nipomo High School, Olympic Hall & Parking Lot
525 North Thompson Avenue
10 AM-5 PM Friday & Saturday, 10AM - 4PM Sunday
Website: www.omsinc.org
- Sept 16-18** **PLACERVILLE, CA.** 77th CFMS Show & Convention
Hosted by El Dorado County Mineral & Gem Society
El Dorado County Fairgrounds, 100 Placerville Drive
Hours: Fri - Sun 10 - 5 daily
Website: www.cfms2016show.com
- Sept 28 -** **YUCCA VALLEY, CA.** Hi-Desert Rockhounds
Oct 2 Sportsman's Club of Joshua Tree, 6225 Sunburst Street
Hours: 9 - 6 daily
Website: www.jtsportsmansclub.com/gem.html
- Oct 1-2** **BORON, CA.** Mojave Mineralogical Society
Boron Recreation Park, 26998 John Street
Hours: Sat 9 - 5; Sun 9 - 4
- Oct 1-2** **VISTA, CA.** Vista Gem & Mineral Society
Antique Gas & Steam Engine Museum
2040 North Santa Fe Avenue
Hours: Sat 10 - 5; Sun 10 - 4
- Oct 8-9** **TRONA, CA.** Searles Lake Gem & Mineral Society
SLGM Show Building, 13337 Main Street
Hours: Sat 7 - 5; Sun 7 - 4
Website: www1.iwvisp.com/tronagemclub
- Oct 15-16** **WHITTIER, CA.** Whittier Gem & Mineral Society
Whittier Community Center, 7630 Washington Avenue
Hours: 10 - 5 daily
Website: wgmsca.com
- Nov 5-6** **ANAHEIM, CA.** American Opal Society
Business Expo Center, 1960 S. Anaheim Way
Hours: Sat 10 - 6; Sun 10 - 5
Website: www.opalsociety.org/

WGMS MEETING LOCATION!
Whittier Community Center
7630 Washington Ave. Whittier



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American Federation of Mineralogical Societies
Special Congress Representing Involved Bulletin Editors



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