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The Red Stick Rockhound News

With members from the greater Baton Rouge area

The Baton Rouge Gem and Mineral Society *Baton Rouge, LA.*

On December 28, 2013 we had the annual club Christmas party. It was hosted again this year by Charles and Marie Ray. We had many that attended and there was plenty to eat and drink. Charles Ray cooked the food and it was delicious. We missed those of you that could not attend. Everyone had a good time.
Cheryl Duplechain

OUR PURPOSE

The Baton Rouge Gem and Mineral Society is organized for charitable and educational purposes to promote interest in the various earth sciences, in particular those hobbies dealing in the art of cutting and polishing gemstones, the science of gems, minerals and metal, as well as their related fields.

MESSAGE FROM THE PRESIDENT
No President's message this month

2014 AFMS Endowment Fund

The kickoff for the 2014 AFMS Endowment Fund drawing has been announced in the December issue of the AFMS Newsletter. Donna Moore (mwfsecretary@gmail.com) chairs the fund raising this year. In the SCFMS, tickets can be purchased from Catherine Rouchon, 5845 Winchester Ln, Clinton, LA 70722 (rouchonc@starband.net). The drawing will be held at the AFMS Banquet, July 14th in Tulsa, OK but you do not have to be present to win. Some of the items to be won include a framed fossil fish, a Mosasaur tooth, a page of mineral stamps, a Montana agate petrified limb cast, a calcite cluster, and two 2 lb copper floats. If you would like to donate a prize or want to purchase tickets, contact Catherine Rouchon. Tickets are $5.00 each or 5 for $20.00.

IN THIS ISSUE

CLUB NEWS

Next Meeting: January 28, 2014
Meetings held fourth Tuesday of the month at the Jones Creek Library @ 7:00 pm**

All articles or reports must be submitted by the first (1st) of the month if you want it in the next edition.

The annual Christmas party took the place of the December meeting. There are no minutes.

JANUARY BIRTHDAY

Glen Gawarecki……..1/5
Glenna Coulter……..1/9
Nikki Cheda……..1/16
Wanda Gawarecki…..1/22
Cherie Schofield……1/30
Andrew Gawarecki….1/31

Geodes
A Very Cool Rock Formation

Geodes are like the Tootsie Roll Pop of the geology world because underneath the hard exterior lies a surprise center!

Hollow Rocks
So, let's start at the beginning: how do you get a hollow rock with lots of sparkling crystals inside? First you need a hollow rock. Geodes start their lives as a hollow bubble inside a layer of rock. The bubble could be from air inside explosive volcanic rock or it could come from the hollow remains of animal burrows or tree roots.

What About The Crystals?
When these rocks form from air bubbles inside of volcanic rock it is pretty easy to picture. Think about the small air bubbles you see in pumice. Now, imagine just one of those bubbles completely surrounded by black or red volcanic rock. As rain pelts down on the hot bubble, the chemicals in the rock are slowly released into the water. Some of the water soaks through the hard, rocky outside of the bubble and is trapped for a moment on the inside.

As the mineral-rich water moves on through the bubble, tiny crystals are left behind, clinging to the sides of the bubble. Millions of years pass while this in and out flow of water gradually builds crystals inside the empty space. The crystal formations might become large single crystals or tightly packed micro-crystals, so small that you can't even distinguish one from another.

An Animal's Home
Let's check out the development of our animal burrow bubble… Long after the animal has moved on or the tree has died and its roots have rotted away, the sediments that surrounded the hollow are being covered up by layers and layers of sediment hundreds of feet think. Eventually the weight of these layers has caused the sediments to turn into rock: sedimentary rock. Just like our volcanic bubble, this animal burrow bubble is host to mineral-filled water flowing in and out through the hollow space. And just like the volcanic bubble, a wide variety of crystals are taking shape inside the animal's former home.

Time Marches On
Fast forward to modern times. The water-soaked land where our bubbles began has become a vast desert where wind howls and the sun beats down. The ground, covered by rocks and scrubby brush yields up unusually shaped rocks. Today, you've found a good field of them and have three nearly-round specimens to crack open when you get home.

All Geodes Are Not Created Equal
The first one is quite hollow but for a nice layer of medium-sized blue crystals. These **dugway geodes** have

bands of blue and pink. The geode at the left and the one at the top of the page are both dugways from Utah. The colors come from the different minerals that flowed through the bubble so many millions of years ago. Another specimen is nearly solid all the way through. The **microcrystals** have formed wide bands of different colors and the tiny opening at the center has a thin ring of pointed crystals. Yet another is completely filled with solid rings of browns, reds and pinks. So, you've really found two geodes and one nodule. **Nodule** is the name for these round forms when they are filled solid.

They Come In Colors
As each specimen offers up a different interior, you wonder, "What causes all the colors?" So you head to the computer and you've arrived at this page, so I'll need to tell you.

Trace Elements
Remember the mineral-rich waters that flowed through the bubbles forming crystals inside? There is a variety of elements that can be present in mineral water. It would all depend on the type of rocks the water passed over and through on its way to the geode. Rocks contain iron, magnesium, sulfur or a host of other elements.

Now, think about the variation that can occur in terms of saturation amounts of the different minerals. You can imagine that the different rocks forming from all these variations could be limitless. But there is some consistency that makes it easier for us.

Quartz, Calcite, Or What?
Most geodes have interiors made of either **quartz** or **calcite**. Quartz crystals are silicates. Silicates are the most common mineral in the crust of the earth. Over 90% of the minerals present in earth's crust are silicates. With this said, you can imagine that silicates are a pretty big group with lots of variation in terms of specific chemical composition.

Calcite's main ingredient is **calcium carbonate** CaCO2: dissolved calcium and carbon with some of the oxygen from the water thrown in.

Small variations Can Make A Big Difference
Now, add in a trace of iron or magnesium or copper and, voila, you have color variation. Magnesium traces in calcite forms a nice pink dolomite layer, while magnesium in silicate accounts for the purples of amethyst.

Heat Can Change It
Now if your geode was close to a lot of heat, that could change the color, too. An amethyst that gets a lot of heat loses its purple color and becomes a soft yellow or citrine. You can see why there are so many color possibilities.

A Day In The Life
So, that little geode you're holding has had quite a journey getting to your hand. Treasure it for its beauty, but also for its history and the complex composition of minerals that made it. You're holding millions of years of work in your hand…enjoy touching the miracle of our earth's creation.

January Birthstone: Garnet

Birthstone Color: Deep Red

One glance at the deep red seeds nestled inside of a pomegranate fruit explains why the word "garnet" comes from the Latin word "granatus," meaning "grain" or "seed." This name was given to the garnet because of its close resemblance to the succulent pomegranate seed. But don't bite into a garnet, because at Moh's hardness 6.5 to 7.5, it will definitely damage the teeth!

There are many myths and legends surrounding the garnet. One Biblical legend is that Noah hung this gem on the ark to light his way through the dark and stormy nights of God's wrath. A Greek myth linked to the garnet is the story of the young goddess of sunshine, Persephone, who was abducted by Hades, god of the underworld. Hades eventually released Persephone, but not before he offered her some pomegranate seeds, which guaranteed her return to him.

First mined in Sri Lanka over 2,500 years ago, the garnet is also found in Africa, Australia, India, Russia, South America; and in the United States, in Arizona and Idaho. Although most commonly known as a red gemstone, the garnet comes in a variety of other hues, including muted yellows, vibrant oranges, rosy pinks, lime greens, and violets—a virtual bouquet of colors. This diversity is due to unique combinations of elements within each particular gem, such as iron, calcium, and manganese.

Archaeologist findings of primitive style garnet jewelry among the graves of lake dwellers dates the early use of this gemstone to the Bronze age. But not all garnet is of gem quality. It is also a very effective abrasive and is used commercially for grinding and polishing. Garnet coated sandpaper is one such industrial use.

The garnet continues to be the protective gem of journeyers. A gift of garnet is thought to be symbolic of love and the desire for a loved one's safe travel and speedy homecoming. It is January's birthstone, but far from being only a winter gem, the garnet, with its brilliance and multitude of colors, is truly one for any season.

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It's all good!

We just wanted to update everyone on what is going on in our life. As we start a new year, Cheryl and I are preparing to sell our home. Our intentions are to move to California to be with our family. This move will not take place for another year or so, but much needs to be done to get us to that point.

We have truly enjoyed being part of The Baton Rouge Gem & Mineral Society. We have made lot of friends. Our commitment to the upcoming show & convention will remain as we prepare for all that entails. But the club does need to look to the future. Someone is needed to fill some of the positions that we both hold. A new Newsletter Editor needs to be found. With a demanding job, selling and moving from our home, the newsletter and arrangements for the convention is just too much for Cheryl to handle. Again, our commitment to the convention will remain. A new Webmaster needs to be found. I am currently doing this and would gladly teach someone how to maintain that site. Our Facebook page has been taken over by Rena McMickens. Any issues with that site could be referred to her. I have some club items that need to be stored somewhere (IE: t-shirts, PA system & club materials).

As for the newsletter: Cheryl has the format laid out on the club laptop. Arranging articles would be fairly easy to do. The challenge of compiling the newsletter and the rewards of the finish product is something I would encourage you to consider.

As for the Website: It, too, is already formatted. The program is on the same club laptop. Maintaining it can be as easy as you would like to make it. I like to keep current news so that everyone can say informed. But it does not necessarily have to be that way. If two different households take these two duties, then the club would need to consider getting another laptop.

And as for club items: Those do not take up much room but does need to be kept out of the weather.

I would like to thank everyone for their encouragements that allowed Cheryl and me to take on all these duties and now is the time to pass them on to someone else. Remember we are not leaving right away, only trying to make the transition go smoothly and we will be around to make it happen.

Ray & Cheryl Duplechain

Cheryl Duplechain; Newsletter Editor
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THE ROCKHOUND

The day is dark and wet and cold,
A high level of ozone and mold;
It's a great day to stay at home,
This is no time to get out and roam;
It's a time to write or paint or read,
Getting cold and wet, I don't need.

But at home, I cannot stay,
Our Club's Field Trip is TODAY!!!
Boots go on, hat on my head,
Hammer in hand, get out the lead;
First a drive, then a walk,
Find the place–from the talk.

Looking for a fossil, mineral or gem,
In a cave or a mountain rim;
Luck and skill, go hand in hand,
On private or government land;
Tension builds, how will I fare?
Only Leverite, or something rare.

Its important that I know,
Rules of collecting, as I go;
Ask permission, before I pick,
Anything up, or break a stick;
I must protect our Club's good name,
Future Rockhounds don't need my shame.

No matter what, the conditions are,
or whether the location, is near or far;
When our Club has a Field Trip planned,
other things from my mind are banned;
Its time for stress to unravel,
Come on Rockhounds–Let's travel!!!

rockhoundblog.com/regular-postings/**rockhound**-**poetry**-placed-at-the...american-federation-of-mineralogical-societies/