

BEEHIVE ROCK & GEM CLUB TIME VALUE DO NOT DELAY
LINDA PILCHER, EDITOR FIRST CLASS MAIL
574 4TH ST
OGDEN, UT 84404



BEEHIVE ROCK
AND GEM CLUB

P.O. BOX 1011
OGDEN, UTAH 84402

VOL. 42 No.01

Website: <http://www.beehiverockandgem.com>

Jan. 2014

MEMBER OF UTAH FEDERATION OF MINERALOGICAL SOCIETIES
ROCKY MOUNTAIN FEDERATION OF MINERALOGICAL SOCIETIES
AMERICAN FEDERATION OF MINERALOGICAL SOCIETIES

The Beehive Rock & Gem Club began in April of 1970.

The purpose of our club is: To collect, cut and polish rocks, to gather fossils, mineral specimens, to discuss and impart our knowledge of the different phases of collecting, polishing and displaying-

To promote, organize and hold meetings, outings, trips, and similar events. To enjoy and protect our natural resources.

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**USUAL DATE FOR MEETING - FOURTH THURSDAY - 7 PM at ROY
MUNICIPAL CENTER MULTIPURPOSE ROOM 5051 S. 1900 W ROY, UT**
November, December has changes. Maybe others.
Call any Board member for current information.

Happy New Year!

Beehive Buzzer

January 2014

Volume 42 Issue 1

BOARD OF DIRECTORS OF THE BEEHIVE ROCK & GEM CLUB FOR 2013

President & Board Chair	Dan Siler	801-737-3013
Vice President	Steve Smith	801-731-4216
Secretary	Dave Offret	801-791-6081
Treasurer	David Law	801-664-4931
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Door Prize Chair	Jim Alexander	801-399-0785
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Mini-show Chair	Alice Crittenden	801-547-7781
Safety Chair	Lynn Hayes	435-723-2216
Publicity	Mark Acker	801-475-4705
Managing Editor of BUZZER	Linda Pilcher	801-392-7620
Associate	Leora Alexander	801-399-0785
Photographer	Shari Bush	801-388-8605
Calling Committee	Sherm & Ricky Thompson	435-760-1362

(Deadline for BUZZER articles is the 2nd Thursday of the month)

Calling Committee ---- Need volunteers to call members before meetings.
6 people calling 6 others + 6 e-mailing 6 others!

FEDERATION REPRESENTATIVES

Rocky Mountain Federation Delegate -----President
Utah Federation Delegate -----TBA
Public Land Advisory Committee ----- Jim Alexander

DUES

Due: October 1
Single - \$11
Couple or

Family - \$16
Junior - \$5
Overdue: January 1

REMINDER: Club fees are due now...Please note, David Law is now accepting dues. Take care of it now so you do not have to worry about it later.

General Objectives of the Club



The purpose of our club is to stimulate interest in the collection of rocks, minerals, gem materials and legal fossils. To discuss and impart our knowledge of the different phases of collecting, cutting, polishing and displaying them. Also to organize educational meetings, field trips and similar events while enjoying and protecting our natural resources.

Membership Dues

Yearly membership dues for adult's members are:

Single \$11.00

Couple or Family.... \$16.00

Junior (under 18, no family membership).....\$5.00

Dues are due:
October 1, of each year.

Meetings

General club meetings are held at 7 PM on the fourth Thursday of each month in the multi-purpose room of the City of Roy Municipal Center located at 5051 South 1900 West, Roy Utah.

News Letter

The Beehive Buzzer is the official newsletter of the Ogden Beehive Rock and Gem Club and is published eleven times per year. Please send your submissions and exchange bulletins to: beehivebuzzer@gmail.com

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Rocky Mountain Federation Delegate....President
Utah Federation Delegate.....Open
Public Land Advisory Committee.....Jim Alexander

ADVERTISING RATES:

For sale ads are permitted for members at no charge. Business advertisements will be charged at the rate of \$5.00 for ¼ page or 15 cents per word for less than ¼ page.

CLUB AFFILIATIONS

The Beehive Rock & Gem Club began in April of 1970 and is a member of the following:

- Utah Federation of Mineralogical Societies
- Rocky Mountain Federation of Mineralogical Societies
- American Federation of Mineralogical Societies Scribe

PRESIDENTS MESSAGE

President was a little busy getting ready to go to quartzite and so he said that when he comes back he will have lots of fun stuff to tell us when he gets back.

JANUARY
Is our
Winter Banquet!

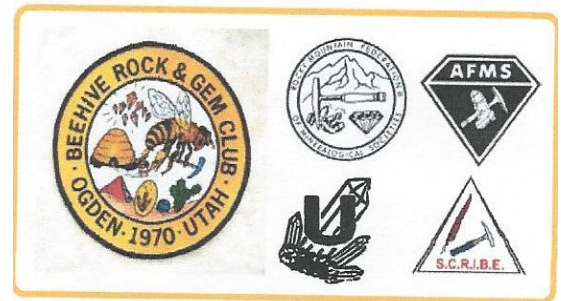
REMINDER:

Please remember to bring a fun dish to share and your dishes and silverware to eat on. Can't wait to see you there!

Up coming shows:

Quartzsite Panorama
Quartzsite AZ
Nov1, 2013 – Feb.27 2014

Multi Federation Field Trip
July 31 – Aug 4th



Multi-federation field trip
Make plans to attend by Doug True field trip chair

The town of Terry Montana may be small, but they are planning on rolling out the red carpet for us as they host the AFMS 2014 the Multi-federation field trip gathering. The dates are from July 31, 2014 to Aug.4th 2014, so mark your calendars and get ready to register!

Terry is right in the middle of the best Montana rock hounding areas. We will have numerous trips to the gravel bars on the Yellowstone River, Productive areas that I've been hunting on annually for 40 + years. Many are accessed only through private property, but permission has been granted. We will be hunting for Montana agates, Jasper, petrified wood, fossil coral, stromatolites, and numerous other "oddities".

We'll have numerous trips into Montana fossil country to the Pierre and Bear Paw formations areas, and we'll collect ammonites, baculites, scaphites, nautiloids and many other shells (70 -95 million years old) in the ancient sea bed areas. We are also working on trips to several areas where we can collect dinosaur fossils from the Hell Creek formation. More information will be forthcoming as plans are solidified.

In addition, we'll have an opportunity to take a guided tour through the Eastern Montana Badlands – a once in a lifetime opportunity.

Start planning your collecting vacation now. Kids are welcome!!! What could be better than four days in Eastern Montana with a chance of collecting wonderful materials.

BUT wait, there's more.... The town of Terry is allowing us to use their 2 block city park for dry camping and other activities. We'll have a pot luck dinners, a barbecue and much, much more.

For more information contact Doug True, Fieldtrip Chair, (406)670-0506, or email <dtrue@Yahoo.com>

Beehive Rock Club Field Trips

There are none planned at this time.

Junior Members Corner

This month is when the rock poems are due and... Kids I hope that you have tried to make a fun poems to share. I cant wait to see what you have accomplished, January is here!



4 billion years,
Rock's been here!
So I don't think,
They'll disappear!
Used for tools,
From times of old,
They may be ores,
With lead or gold...
4 billion years,
Of rocks, I said,
Used by Flintstones,
One called Fred...



Mr. R's Science

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 date 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.

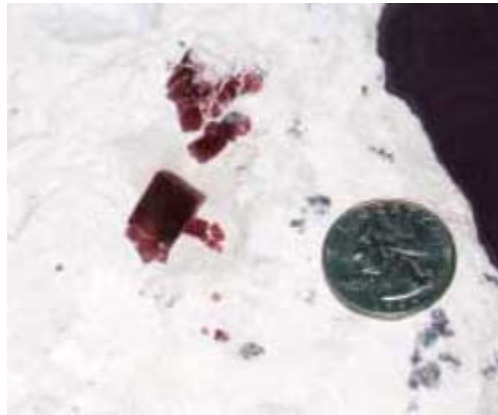


Garnet is the name of a group of minerals that come in a rainbow of colors, from the deep red of the pyrope garnet to the vibrant green of tsavorites. Today the most important sources for garnet are Africa Sri Lanka and India.

What gemstone is found in Utah that is rarer than diamond and more valuable than gold?

The gemstone has several different names: red beryl, red emerald, or bixbite. Originally, the mineral was named bixbite, but now red beryl is the most accepted designation. Red beryl is estimated to be worth 1,000 times more than gold and is so rare that one red beryl crystal is found for every 150,000 diamonds.

In 1904, Maynard Bixby discovered red beryl in the Thomas Range located in Juab County, Utah. Bixby thought it might be a new variety of beryl, but the raspberry-red color did not correlate with any beryl known to exist at that time (green, blue, pink, yellow, and clear/white). W.F. Hillebrand, a geochemist from the National College in Washington, D.C., identified the mineral as a new type of beryl in 1905.



Specimen of red beryl from the Ruby-Violet claims in the Wah Wah Mountains. U.S. quarter for scale.

In 1912, Dr. A. Eppler named it bixbite in honor of its discoverer. Laboratory analysis showed that manganese and small amounts of iron, chromium, and calcium create the raspberry-red color of red beryl. Like other beryl, red beryl has a hardness of 7.5 to 8.0 and its chemical composition is $\text{Be}_3\text{Al}_2\text{Si}_6\text{O}_{18}$.

Red beryl formation began with the eruption of a topaz rhyolite lava from volcanic vents. As the lava began to cool, shrinkage cracks formed, creating pathways for high temperature gases rich in beryllium to escape. Oxidized surface water also began seeping into these cracks and mixed with the rising beryllium gases. The gases reacted with the surface water, silica, alkali feldspar, and iron manganese oxides from the lava to form red beryl crystals.

Red beryl probably grew at temperatures between 300 to 650 degrees Celsius. Red beryl is presently found at only three locations in the world: the Thomas Range and the Wah Wah Mountains in west-central Utah, and the Black Range in New Mexico.

In the Thomas Range, red beryl occurs primarily as short, flat, hexagonal crystals or more rarely as elongated, barrel shaped crystals. The crystals are generally up to 2 – 10 mm long and 4 – 6 mm thick. Many of these crystals are too small to be faceted. They are found in cavities and fractures within the Topaz Mountain rhyolite that erupted approximately 6 to 7 million years ago from volcanic vents in the area.

Small crystals can be found in an area called "the Cove," where they may be attached to other minerals such as topaz, bixbyite, garnet, pseudobrookite, or hematite. Larger crystals that have been faceted into gemstones have been found in the northwest part of the Thomas Range near Wildhorse Springs.

The only known deposit of large, gem-quality red beryl in the world is from the Ruby-Violet claims in the Wah Wah Mountains of Beaver County, Utah. These are private claims and no collecting is allowed without permission from the present claim owners.

The crystals occur primarily as elongated hexagonal crystals that are up to 15 mm in length, and the largest crystal discovered to date is 14 mm wide and 34 mm long. Red beryl is generally found along large, near-vertical, northwest-trending fractures and clay-filled seams within the rhyolite member of the Blawn Formation. The rhyolite erupted approximately 18 to 20 million years ago from volcanic vents in the area.

The property has periodically been worked and continues to produce nice mineral specimens and stones suitable for faceting. Red beryl crystals from this location that have been faceted sell for an average of \$2,000 per carat. For comparison, gold is currently worth \$300 to \$320 per ounce (one ounce is equal to 155 carats). [2002 prices]

For more information regarding red beryl, contact the Natural Resources Map & Bookstore – (801) 537-3320, or toll free at 1 (888) UTAHMAP. The bookstore has several rock and mineral publications available for purchase that describe areas where to collect red beryl.

Glad You Asked article, [Survey Notes](#), v. 34 no. 3, September 2002

What in the World Is Moissanite? The Worlds Newest Jewelry Stone

Moissanite is a naturally occurring crystal which occurs in such small amounts and sizes as to be uncommercial.

It was discovered in 1893 by Henri Moissan in a meteorite which had fallen to earth some 50000 years ago and landed in the Arizona desert. Dr Moissan started studying small fragments from this meteorite and made an astonishing discovery. Imbedded in it were tiny amounts of what looked like a new unknown jewel.

Although it occurs naturally on earth it is only in tiny quantities and commercially unviable.

Scientists could see its potential as a brilliant new jewelry stone and so set out to manufacture it in a lab. It's application as a jewel was immediately clear and so a new naturally occurring but also man made jewel was born. The process of making it is very new. It has only been commercially available in jewelry since 1998, so is only a few years old on the jewelry market.

It is exceedingly hard to make and the process to do so is kept very secret. It can only currently be made in reasonably small quantities.

There are a number of properties of jewels which are common amongst them and are therefore used for comparison purposes. These properties are beauty, color, brilliance, fire and luster, durability and rarity.

The brilliance of a jewel is created by the cut. A diamond in it's natural state for instance is pretty unimpressive. Give it a proper design and use the diamonds natural refraction of light and it is beautiful. It is the cut that does this, however it is the qualities of the jewel which produce the brilliance once it has been cut. Brilliance can be measured by the amount of light which enters a jewel compared with the amount which comes back when put under a light source.

Fire refers to the ability of the stone to refract light back out in colors. The light rays break up into their original spectrum colors and that is what gives the jewel its special character.

Luster is the amount of light reflected back from the surface of the jewel.

Durability is the toughness, the resistance to scratching, chipping, or splitting. This is determined by its hardness, and it is also the hardness which determines the brilliance.

Rarity is reasonably obvious. It is the availability of the jewel.

Moissanite equals or outperforms diamonds in just about all categories. In particular it has superior brilliance, fire and luster. The only category in which it doesn't outperform diamonds is hardness. It is slightly softer than diamond, but only very slightly, and is harder than all other stones. Jewelers' can struggle to tell the difference between diamonds and Moissanite. In fact there is now a specific instrument which has been developed to help jewelers' to tell the difference between diamond and moissanite as it is so hard to see and so many cannot tell them apart.

It will not scratch or become cloudy with wear.

In 1999 the US imported 23.4 million carats (karats) of diamond and only .07 million carats of Moissanite. It is very rare.

There are other diamond substitutes available such as cubic zirconia or even glass. Moissanite outperforms all these admirably.

Moissanite is not really a diamond substitute though. It is a new jewel in its own right. It is just so good that it is immediately compared to diamonds which are always thought of as the best jewel.

If you are thinking of diamond jewelry then moissanite has to be considered. It is far cheaper than a comparable diamond. It is high quality. It is a great jewel. At the end of the day it is not diamond and so if you are determined to get a diamond then do so. But it is a very attractive alternative.

It is more and more becoming the choice of the stars.

Kim Cattrall's character, Samantha Jones, wore a brilliant white gold ring featuring Moissanite in an episode during the last season of the TV hit Sex and the City.

Kiko Ellsworth, one of Hollywood's "Hot" young stars wore a brilliant pair of 2 ½ ct. Moissanite "Martini Stud" earrings to the premiere of Bad Boys II, on July 9th in Los Angeles.

Many other stars have been seen wearing moissanite jewelry in the last few years. It is becoming the new fashion in jewelry. It is also becoming one of the most popular engagement ring stones.

Moissanite is the newest and certainly one of the best jewelry stones available. Moissanite is here to stay.

Article Source: <http://EzineArticles.com/36633>

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