

The official bulletin of the Dothan Gem & Mineral Club, Inc.

ROCKHOUNDS HERALD

920 Yorktown Road, Dothan, AL 36301-4372

www.wiregrassrockhounds.com

August 2013

Happy "Hot Enough For You?" Month

Words from...

The President

It was another great turnout for the second, of three socials we have planned this summer. From all indications, the silent auction was a big hit...at least with everyone who managed to be the last bidder when time was called.

The same could be said of the live auction. Rampant trashtalkin' helped drive up the price on several pieces, but I think everyone would agree the items purchased were still a bargain. And if you didn't get to leave with something new that afternoon, you'll have another chance at the **August Social scheduled for Saturday, the 24th**. We'll repeat the eating and the auction. See the Announcements section below for full details.

In this newsletter, we offer another quick beading project—a cellphone charm—for the folks who agree it is too hot to be outside for very long. Everybody can use a cellphone charm, right?

With our regular meetings commencing again next month, it's not too early to start thinking about what we want to do as a club in the coming year. Go ahead and make a list of the classes you'd like to see offered, the digs you'd like to go on, and any other issues you'd like to bring up at the first meeting. We'll have one final, relaxing gathering this month, but we need to be ready for business in September. The club has grown a lot and we want to ensure everybody leaves each meeting or event looking forward to what's going to happen next.

See you on the 24th.

Jeff

Announcements

August Social – **Saturday, August 24th** at the Fellowship Hall. As in the past, we'll arrive at noon and plan to eat at 1:00 PM. Please bring a dish to share, along with any rocks or other items you'd like to auction off.

Upcoming Shows

September 6 – 8

Forsyth Gem & Mineral Club

Winston-Salem, NC

Source: www.the-vug.com/vug/vugshows.html

Summer Project # 2

Cell Phone Charms

Here's a fun new popular item.



Tools:
Wirecutter
Chain-nose Pliers

Materials:

- 1 cell phone charm strap
- 1 eyepin
- 3 headpins
- 1 8 or 10mm focal bead
- 5 metal spacer beads
- 5 6mm crystals
- 3 4mm crystals
- 1 charm (optional, if using charm substitute an eyepin for one of the headpins)



Step 1 - add a 6mm crystal, a spacer bead and a 4mm crystal to each of the headpins; make a loop directly above the beads.

Step 2 - open loop of eyepin gently to the side, add all three crystal drops and close loop.

Step 3 - add a 6mm crystal, spacer bead, focal bead, spacer bead and the last 6mm crystal; create a loop over the beads.

Step 4 - Gently open the loop to the side and add the ring of the cell phone strap. Hook onto the phone and your ready to talk in style!



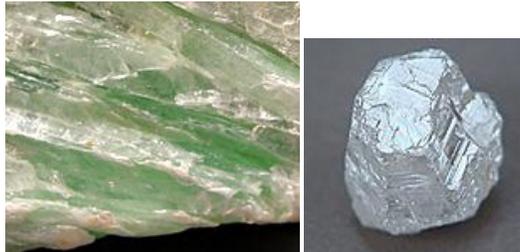
Determining Gem Hardness

The tendency to resist scratching in a gem is known as its hardness. Of the three factors comprising durability, it is the most familiar. Even those folks with just a passing interest in gems know that they can be ranked on a scale of hardness. Hardness is primarily the result of the strength of the chemical bonds between the gem's constituent atoms (how tightly they are bound to one another).

The hardness of a gem affects its wearability, luster, and resistance to cutting and polishing. All other factors being equal, harder gems are more useable in jewelry, develop a brighter surface luster, and take more time and effort to cut and polish. They will retain their polish longer than softer gems, given equal wear and tear.

The familiar 1-10 Mohs' Scale of hardness, is not an absolute measure, but rather a relative one --> a kind of "pecking order". Gems ranked at a higher number on the scale can scratch those ranked lower, and will in turn, be scratched by those whose number is higher than theirs.

Frederich Mohs, a 19th century German mineralogist was the originator, and we still use his scale, with the minerals which he designated as reference points today. For example, (softest) talc = 1, quartz = 7 and diamond = 10 (hardest).



[Talc, the softest on the Mohs' scale, diamond, the hardest]

In mineralogy, one of the key tests commonly used for purposes of identification is a "scratch" test, which is done with a set of implements known as hardness points. These, usually steel, "pencils" are tipped with various minerals (or metals) of known hardness. By drawing them across the surface of an unknown mineral sequentially, the tester can determine the sample's approximate hardness. In gemology, such tests are rarely used as they are destructive in nature. Exceptions might be in testing the bottom of a carving, or a piece of gem rough, or a bit of material which has broken off. Another drawback of the standard hardness points is that they are not precise, but limited to giving a "ballpark" estimate.

In a laboratory setting, exquisitely precise measurements can be made with sclerometers. These devices use diamond-tipped, hydraulically operated probes, and can give an absolute reading on the force necessary to penetrate the surface of a material.

Not many hikers, nature lovers, or rockhounds carry hardness points with around with them on their treks, but the use of just a few ordinary materials can allow such individuals to do pretty good hardness tests in the field.

The Practical or Field Mohs' Scale

1-2: easily scratched by fingernail

3-4: scratched by copper coin

5-6: easily, and not so easily, scratched with pocket knife

7: scratches window glass/scratched by steel file

8-10: scratches window glass, but not scratched by steel file:

Hardness can be directional. This is actually quite understandable, as it depends on chemical bonds which can differ in strength, and in distance from each other, depending on which axis of the crystal we are observing. Generally such differences are relatively small and of little consequence, but there are two notable cases where they are dramatic and important. 1) Kyanite is notoriously difficult to cut because of its extreme directional hardness differences. 2) Diamond cutting would scarcely be possible unless the cutters could use the directional hardness of that gem to their advantage .

SOFT GEMS:



[Ivory and jet: 2.5, pearl: 3, sphalerite: 3.5, fluorite: 4]

GEMS OF INTERMEDIATE HARDNESS



[Scapolite: 6, Tanzanite: 6.5; garnet: 7 - 7.5 depending on species, tourmaline: 7.5]

HARD GEMS



[Spinel & topaz: 8; chrysoberyl: 8.5, sapphire: 9]

Summer Social – July 2013

Photos by Pat



Great gathering for the July Social, which offered really tasty food and more than a little trashtalkin' as to who was going home with a couple of the main auction items. ☺

Summer Social – July 2013

Photos by Pat



Lots of interest in the items up for silent auction, but with an array of treasures such as these...



...that was no surprise.





Rocks and Minerals

by Kaelyn Serum

e	v	e	o	k	d	y	t	i	b	s	e	s	r	m	n	g
l	n	i	e	m	g	i	g	m	t	m	d	k	g	l	n	m
c	u	h	g	v	t	r	n	o	x	h	l	y	e	i	v	e
y	c	h	e	r	e	i	g	n	e	o	u	s	r	a	s	l
c	a	r	b	o	n	d	i	o	x	i	d	e	s	i	t	t
k	l	c	t	b	o	k	n	e	e	o	h	d	e	c	n	i
c	c	l	e	e	v	i	s	u	r	t	n	i	i	o	e	n
o	i	c	i	h	p	r	o	m	a	t	e	m	r	o	m	g
r	t	o	n	m	f	g	s	e	e	c	v	e	h	l	i	n
r	e	h	t	l	e	a	w	t	m	i	i	n	e	i	d	s
t	m	o	w	o	b	s	s	a	n	d	s	t	o	n	e	i
a	r	k	l	i	t	h	t	n	e	c	u	a	a	g	s	c
a	f	o	r	m	a	t	i	o	n	e	r	r	h	r	i	b
t	g	m	o	l	e	i	r	b	n	e	t	y	i	i	c	c
y	e	b	e	n	e	r	a	r	e	e	x	i	g	n	n	d
i	i	a	m	u	i	c	l	a	c	w	e	m	r	l	a	o
a	e	i	e	c	n	e	i	c	s	o	m	e	c	l	b	x

calcite

calcium

carbon dioxide

carbonate

cooling

extrusive

formation

geology

igneous

intrusive

limestone

melting

metamorphic

rock cycle

sandstone

science

sedimentary

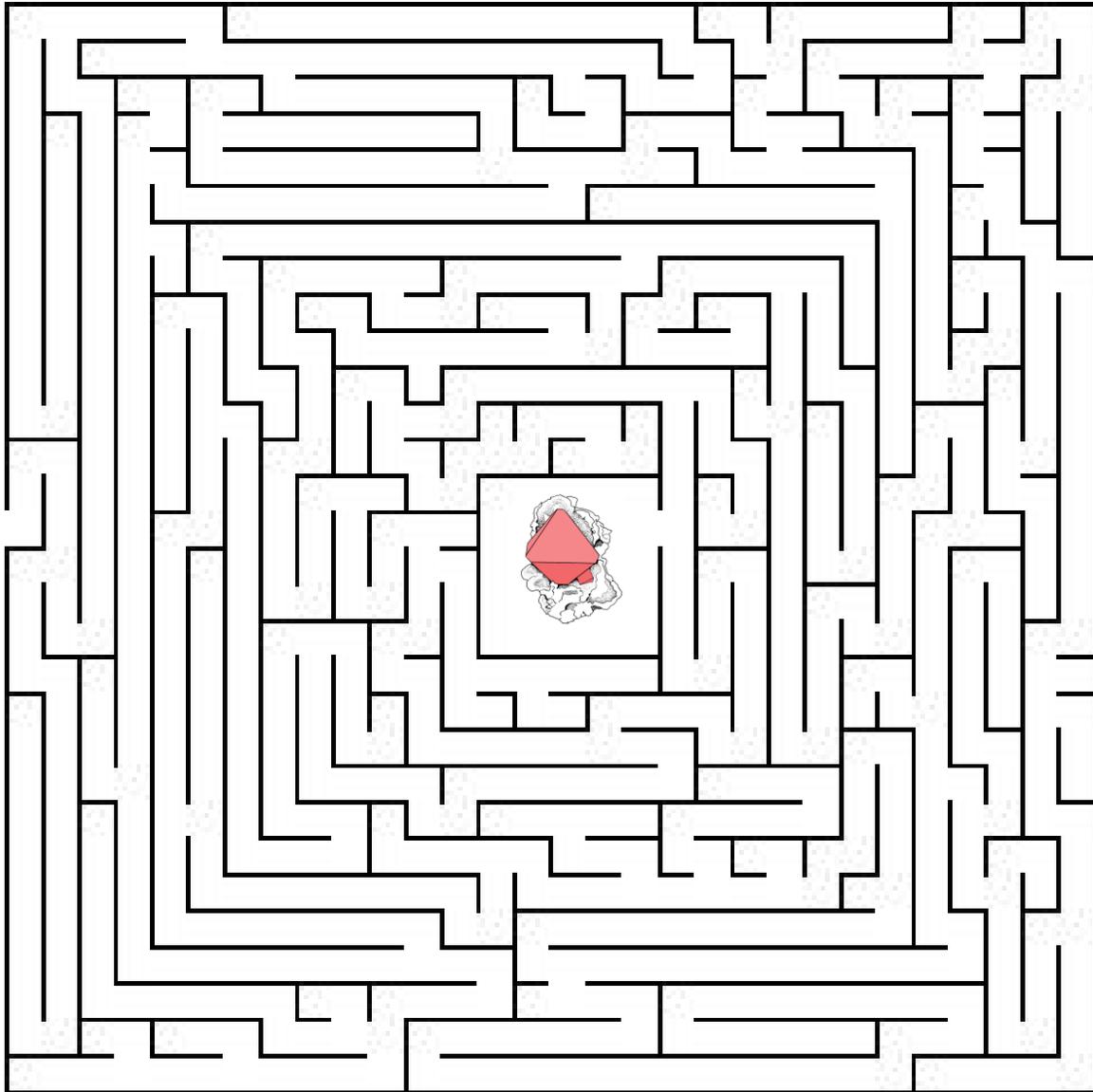
sediments

shale

weathering

“Find the Mineral” Maze

This isn't tough, but it's fun. Make it interesting. Copy the maze and give it to 10 friends. Make it a contest and see who can find the fluorite crystal the fastest.



Who What Where When Why How

August Birthdays

AUG 2 – Christian Holderith

AUG 8 – Dawn Clay

AUG 11 – Wanda Moore

AUG 14 – Arnie Lambert

AUG 23 – Barbara Meredith

AUG 25 – Nancy Vaughn

Random Rock Facts

Almost all gems of mineral origin form in the Earth's crust, with the notable exceptions of peridot and diamond, which form in the mantle, and all of them are mined in or on the Earth's crust.

Peridot is in the orthorhombic crystal system and is the modern birthstone for August.

Source: <http://www.bwsmigel.info/Lesson10/DE.Gem.Formation.html>

Meeting Information

Time: 2:00 PM

Date: Fourth Sunday of each month (except June, July and August)

Place: Fellowship Hall – Tabernacle United Methodist Church
4329 S. Brannon Stand Road
Dothan, AL

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President – Jeff DeRoche
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Show Chair – Arnie Lambert
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Hospitality Chair – JoAn Lambert
334-792-7116

Club Hostess – Laural Meints
334-723-2695

Website: www.wiregrassrockhounds.com

Objectives

To stimulate interest in lapidary, earth science and, when necessary, other related fields.

To sponsor an educational program within the membership to increase the knowledge of its members in the properties, identifications and evaluations of rocks, minerals, fossils and other related subjects.

To cooperate and aid in the solution of its members' problems encountered in the Club's objectives.

To cooperate with other mineralogical and geological clubs and societies.

To arrange and conduct field trips to facilitate the collection of minerals.

To provide opportunity for exchange and exhibition of specimens and materials.

To conduct its affairs without profit and to refrain from using its assets for pecuniary benefit of any individual or group.

Classified Ads

Looking for an item to round out your rock collection?

Got a specimen, tool or handicraft for sale or trade?

Submit the pertinent details to me by the 10th of each month and your inclinations will be made known to the membership in the next bulletin.

N. J. Blackwell
28 Lakeview Trail, Apt. C
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Email: Tfavorite7@aol.com

Annual Dues

Single \$15
Family \$20

Refreshments

AUG 24 – Potluck Social

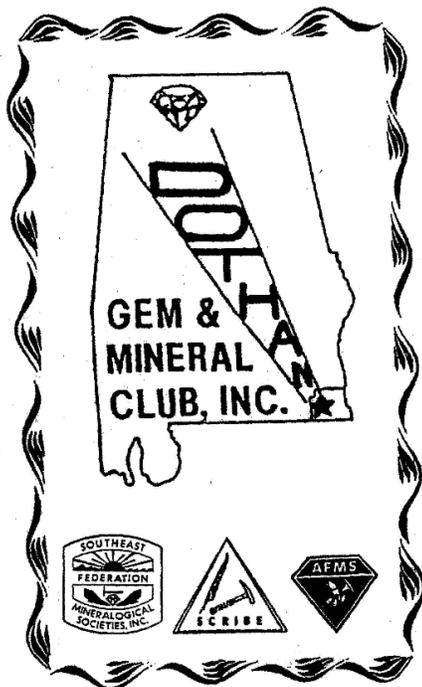
SEP 22 – TBD

OCT 27 – Ginger & Carlos Merino

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Where you might hear...

Eluvial v. Alluvial

– the product of the erosion of rocks that has remained in its place of origin, versus a deposit of sand, mud, etc., formed by flowing water.

Flat terrain, especially that which is in an area that is arid, is most likely to yield eluvial gems.

It is not surprising, then, that we find eluvial peridot at a place named "Peridot Mesa" (mesa = table top).

Alluvial gems however, are most likely to be found in the foot hills and valleys of mountain ranges.

Sources: <http://www.bwsmigel.info/Lesson10/DE.Gem.Formation.html>
<http://dictionary.reference.com/>

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