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

Rockhounds Herald

920 Yorktown Road, Dothan, AL 36301-4372

www.wiregrassrockhounds.com

February 2016

Amethyst SiO_2 Amethyst SiO_2 Amethyst SiO_2 Amethyst SiO_2 Amethyst SiO_2

Words from…

The President

Bruce, Kat and I had a chance to go to the Panama City Gem & Mineral Show on Saturday. We ran into quite a few club members there. I just wanted to say thanks for supporting one of our fellow rock clubs. The show was really good. They had a nice variety of vendors and lots of stuff to look at. They seemed to have steady foot traffic while we were there so hopefully that is a good sign for our upcoming show.

I want to thank Garry Shirah for running the January meeting and taking notes. Both Bruce and I ended up getting some form of the Enterprise Crud and we didn't want to drag it into the group.

Hope to see everyone at our meeting on the 28th. This will be the last meeting before our show. If you have things to donate for the silent auction, please bring them to the meeting. We also need to make sure Jeff has all the help he needs for set up. Don't forget that JoAn Lambert will be teaching us how to make shell trees after the meeting so bring your supplies along.

Pat

Announcement

Gem Tree Class – The first class gem tree class is scheduled immediately following our meeting on February 28. Bring your wirecutter, pliers, glue (E6000 is recommended), pink and white shells, and gold wire (28 or 26 weight). Arnie has a selection of items for the tree bases, but if you already have something you'd like to use, bring it along. For questions, call JoAn Lambert at 334-792-7116.

Membership Dues – Time again to pay your annual club dues. Diane Rodenhizer will be accepting checks and cash from now until the February 28 meeting. If you can't make it to the meeting, please send a check (no cash, please) to: Diane Rodenhizer, 478 Private Road 1106, Enterprise, AL 36330.

Upcoming Shows

February 27	**Imperial Bone Valley Gem, Mineral & Fossil Society**	**Lakeland, FL**
February 28	**The Villages Gem & Mineral Society**	**The Villages, FL**
February 27 – 28	**Mississippi Gem and Mineral Society**	**Jackson, MS**
March 6 – 8	**Suncoast Gem & Mineral Society**	**St. Petersburg, FL**
March 11 – 13	**Aiken Gem, Mineral and Fossil Society and Augusta Gem and mineral Society**	**Augusta, GA**
March 18 – 20	**Rome Georgia Mineral Society**	**Rome, GA**
March 19 – 20	**Dothan Gem & Mineral Club**	**Dothan, AL**

Source: http://www.amfed.org/sfms/club-shows-123.html

Meeting Minutes – January 2016 – Secretary

Treasurer Diane Rodenhizer submitted the treasurer's report which was approved by the members present.

As Show Chairman, Jeff DeRoche reminded everyone that our show will be March 19 – 20. It will be held at the Houston County Farm Center at the same time as the Wiregrass Highland Games. We hope the Highland Games will add a facet to our show. Perhaps we will receive some additional foot traffic from that event.

Field Trip Chairman, Garry Shirah, needs your ideas for field trip destinations. Several possibilities were discussed, and we will certainly hit the road a few times this year. The April dig at Graves Mountain, Georgia is on the calendar for Thursday, April 21, through Sunday, April 24. There will more info to come regarding this trip.

We missed many of our members at the January meeting, including our president and our secretary. Several were participating in the Panama City Gem & Mineral Society, others were absent due to sickness. It is apparent that the cold and flu season is upon us. Hopefully, we will be back to full strength in February. We look forward to seeing you then.

Respectfully submitted
Garry Shirah (stand-in secretary)

NewsFlash Weblinks for the Perpetually Curious

Tracing a gem's origins: Lasers identify the country—and even a mine—that a precious stone hails from

https://student.societyforscience.org/article/tracing-gem%E2%80%99s-origins

Four Extremely Rare Red Diamonds Are Now for Sale

http://www.businessinsider.com/extremely-rare-red-diamonds-are-now-for-sale-2014-8

Who's in that vomit, anyhow?

http://phys.org/news/2015-11-vomit.html

Rock Humor ?

Bubba walks into a hardware store and asks the clerk for a diamond-bladed saw that will cut through 3 inches of hard rock. So the clerk sells him one.

The next day, Bubba walks into the same store and says to the clerk, "This saw is no good. It only cut 2 inches of rock in 3 hours."

Puzzled, the clerk replies, "Gee, let me take a look at it."

When he pulls the starter cord, the saw starts right up and Bubba says, "What's that noise?"

Source: http://mineralhumor.homestead.com/OldJokes.html

Alabama Gold Mines, Prospecting, Panning, Treasure Hunting and Rockhounding

Many people enjoy prospecting and panning for gold in Alabama. The gold area of Alabama is laced with gold-bearing streams where prospecting and panning for gold is done as a delightful outdoor recreation. A good gift.

Treasure hunters with metal detectors do prospecting with their detectors in hopes of finding a gold nugget. Rockhounds and mineral collectors search for garnets and black tourmaline gem stones.

WHERE TO LOOK FOR AND FIND GOLD IN ALABAMA

Big Ten, Inc.'s Alabama Gold Prospecting and Panning Map shows places where to look to find gold near: Alabaster, Alexander City, Anniston, Ashland, Auburn, Calera, Camp Hill, Carrville, Childersburg, Clanton, Columbiana, Cragford, Dadeville, Fort McClellan, Gold Hill, Goodwater, Heflin, Jordan Lake, Lake Mitchell, Lafayette, Lineville, Louina, Martin Lake, Mignon, Parkdale, Pell City, Prattville, Oxford, Red Hill, Roanoke, Rockford, Talladega, Talladega National Forest, Tallassee, Wadley, Wedowee and Wetumpka.

It shows one hundred forty (140) gold mines and prospecting and panning locations from official geological records of the State of Alabama and the federal government. Locations for finding gold are shown within 25 miles of each of the above listed places. These gold deposit locations, which show where gold has been found in the past, are clearly marked.

The map is done in color. The margin of the map has text that tells where to look for gold in a streambed, how to tell "fools gold" from real gold and gives step-by-step gold panning instructions. You can quickly learn to pan by following the instructions on the map.

Comments on Mining of Gold, Gold Prospecting, Gold Panning, Treasure Hunting and Rockhounding in Alabama

The gold prospecting and mining locations in Alabama start in Chilton County between Montgomery and Birmingham and continue to the east and northeast to the Alabama/Georgia state line. The gold panning, prospecting and mining sites then carry on into Georgia and thence on through the Carolinas to northern Virginia. Gold prospecting and panning locations will be seen in the Talladega National Forest, the boundaries of which are shown on the Alabama Gold Prospecting and Panning Map.

Gold has also been found in Gold Branch, a creek in the northeast corner of Elmore county. Alabama Highway 229 crosses Gold Branch between Kent and Red Hill. Gold Branch flows into the Tallapoosa River about five miles downstream of the dam at Martin Lake. The deposit appears to be a continuation of the trend of gold mining sites shown along Martin Lake on the Alabama Gold Prospecting and Panning Map.

Note: Gold historical information herein was obtained from research of geological records of the Alabama Geological Survey, the U. S. Bureau of Mines, the U.S. Geological Survey and similar documents as pertains to gold mines, gold prospecting and panning areas and mineral and gem stone occurrences in Alabama. Prior work by Thomas A. Simpson, Thornton L. Neathery and George I. Adams is acknowledged.

Alabama geological documents state that it is generally agreed by historians that the Indians and Spanish explorers did not find gold in Alabama. There is no way to confirm the exact year of discovery of gold in Alabama; however, it is accepted to have been about 1830.

Gold Panning

After the gold discoveries in Georgia in 1828, gold prospectors expanded their search for gold into Alabama. Intruders prospected for gold on lands belonging to the Creek Indians, who held the area that included the gold deposits. A treaty was negotiated by the United States for the lands of the Creeks. The treaty was signed in 1832; but, before the removal of the Indians was accomplished, the state legislature formed the lands into counties and settlers flocked in.

Further research of gold history as recorded in geological reports, reveals that about 1836 there was a great deal of excitement in the gold fields of Alabama. One of the early gold districts, Arbacoochee, is said to have given employment to 600 men and in 1845 had a contributory population of 5,000 inhabitants. Goldville, another Alabama gold district, was said to have had 14 stores and the population in the locality was at least 3,000. Goldville later became a cross-roads without a store.

Most Alabama gold miners left the state to join the California Gold Rush in 1849. Gold prospecting and panning in Alabama revived when Cornish miners came from Tennessee in 1853-1854 to search for copper. There was another revival of gold mining in the 1880's and cyaniding was introduced in Alabama in 1903.

Some Alabama gold mines were in operation at various times up to 1916. Another spurt in panning and prospecting for gold took place during the depression when people were out of work and the price of gold was increased to $35 per ounce. Gold pans and sluice boxes were widely used to recover gold from stream placers.

ALABAMA/SOUTH CAROLINA GOLD MAP
One hundred forty (140) gold mines and prospecting sites are shown in Alabama. Gold mining in Alabama began in the 1830's and the hobby of recreational gold prospecting and panning is enjoyed by many people today. A geological report states: "The Hilton Brothers reopened the pit. They succeeded in obtaining 65 ounces of gold from a hole 3 feet by 2 feet by 20 inches; the result of half a day's work."

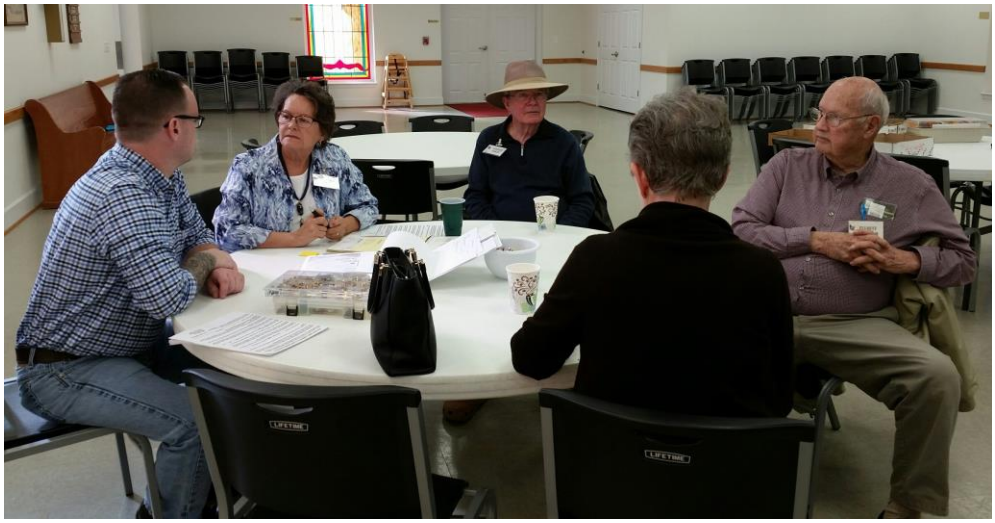
One hundred thirty (130) gold mines and prospecting sites are shown in South Carolina. There were several operating gold mines in South Carolina in recent years. Treasure hunters using metal detectors like to "gold nugget shoot" in the gold areas and "coin shoot" at the rural schools and churches shown.

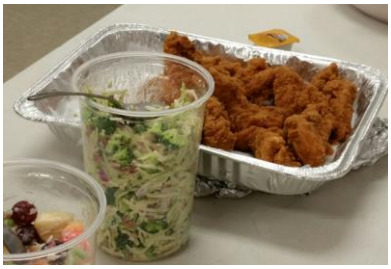
To request gold maps please go to REQUESTING GOLD MAPS .

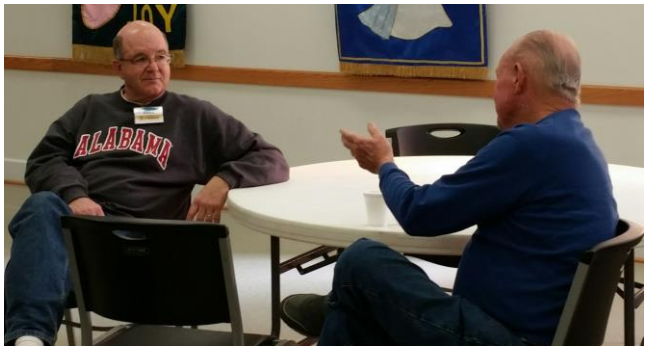
Source: http://goldmaps.com/east/alabama_gold_mines.htm
Reprinted with permission of Mr. Charles Overbey and H & H Engineering, Orlando, FL.

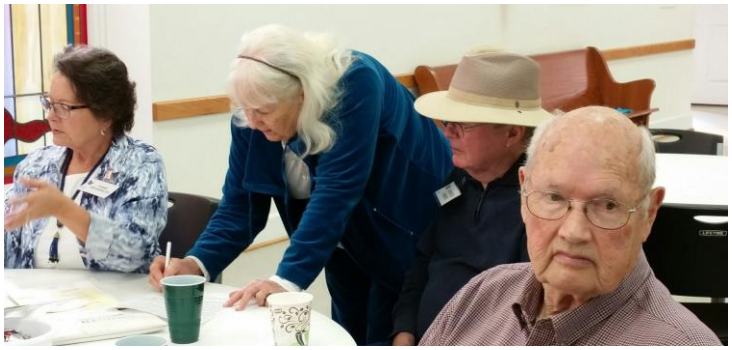
Club Meeting – January 2015

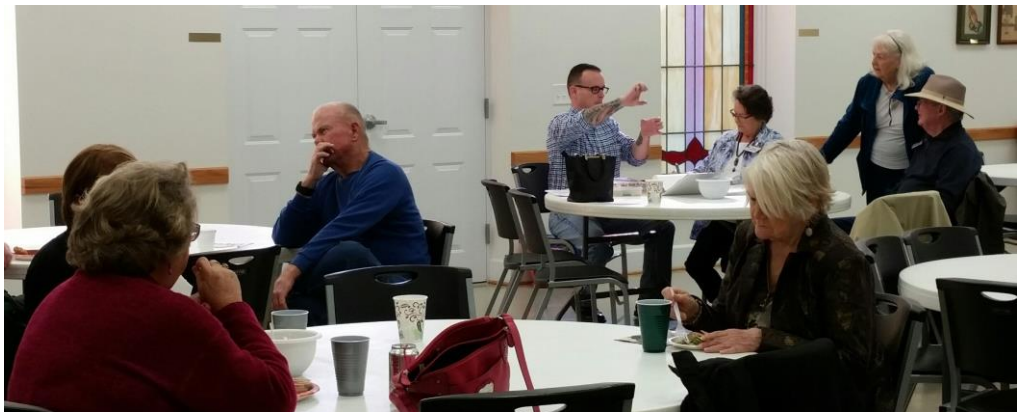
Photos by Joan

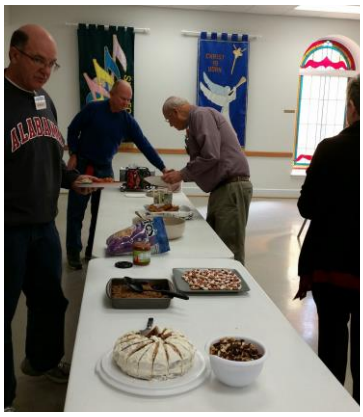


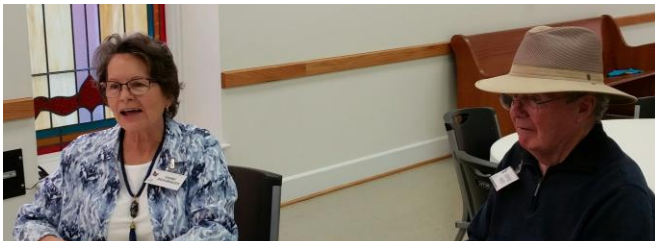


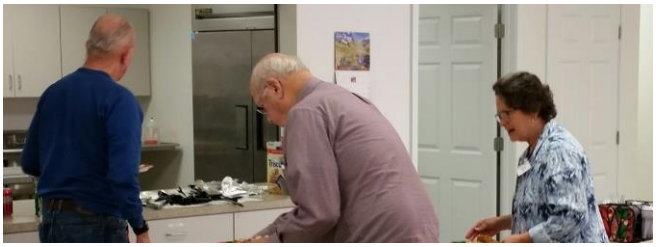








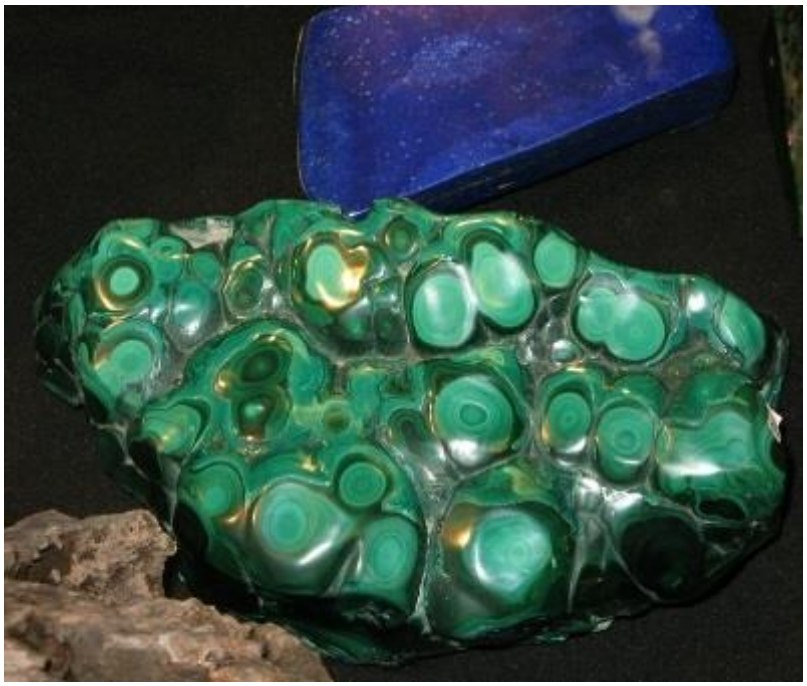




Specimens at PC Show – January 2015

Photos by Bruce

Just a handful of the beautiful specimens displayed at the Panama City Gem & Mineral Show.



Kid's Corner

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 thick. 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** $CaCO_3$: 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. Calcite with magnesium and a trace of manganese forms a nice pink dolomite layer, while iron 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.

Source: http://www.rocksandminerals4u.com/geodes.html

Who What Where When Why How

February Birthdays

FEB 15 Steven Ward
FEB 20 Gary Meredith
FEB 23 Chris Wisham
FEB 24 John Webber
FEB 26 Samantha Merino
FEB 28 Bill Tharpe

Random Rock Facts

A mineral:

- Is naturally occurring
- Is a solid
- Is inorganic (mostly)
- Has a fixed chemical formula
- Has an orderly crystalline structure

Source: http://www.rocksandminerals4u.com/what_is_a_mineral.html
Reprinted with permission from Doug Mann

Meeting Information

Time: 2:00 PM
Date: Fourth Sunday of each month (except June, July and August)
Place: Fellowship Hall – Tabernacle United Methodist Church
4205 S. Brannon Stand Road
Dothan, AL

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
Daleville, AL 36322
Phone: 334-503-0308
Email: Tsavorite7@aol.com

Annual Dues

Single $15
Family $20

Officers

President – Pat LeDuc
334-806-5626

Vice President – Garry Shirah
334-671-4192

Secretary – Bruce Fizzell
334-577-4353

Treasurer – Diane Rodenhizer
334-447-3610

Bulletin Editor – Joan Blackwell
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Webmaster – Pat LeDuc
334-806-5626

Membership Chair – Diane Rodenhizer
334-447-3610

Show Chair – Jeff DeRoche
334-673-3554

Field Trips Chair – Garry Shirah
334-671-4192

Hospitality Chair – Vacant

Club Hostess – Vacant

Club Liaison – Garry Shirah
334-671-4192

Refreshments

FEB 28 – Potluck Refreshments

ROCKHOUNDS HERALD
Editor – N. J. Blackwell
28 Lakeview Trail, Apt. C
Daleville, AL 36322

www.wiregrassrockhounds.com

Where you might hear…

Hardness is a measure of a mineral's resistance to scratching.

The Mohs Scale is a set of 10 minerals whose hardness is known:

1. **Talc**
2. **Gypsum**
3. **Calcite**
4. **Fluorite**
5. **Apatite**
6. **Orthoclase Feldspar**
7. **Quartz**
8. **Topaz**
9. **Corundum**
10. **Diamond**

The Field Mohs Scale is:

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

Reprinted with permission from Dr. Barbara Smigel
Source: www.bwsmigel.info/Lesson3/DEPhysical.Properties.html

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American Federation of Mineralogical Societies