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

Rockhounds Herald

920 Yorktown Road, Dothan, AL 36301-4372

www.wiregrassrockhounds.com

May 2018

Words from…

The President

The club and I want to extend a big "Thank You" to Dan & Pat Harriger for making the trip to Dothan for the presentation. Dan's talk about the Alabama Department of Conservation & Natural Resources Administrative Code, State Lands Division Chapter 220-4-.01 Geophysical Exploration of State of Alabama Lands, was very informative. Changes to this code appear to impact some of our rock hounding activities so we will need to get clarification on a few issues.

Since Dan is the President of the North Alabama Chapter of the Gold Prospectors Association of America, we had a bunch of prospecting questions for him too. He and Pat agree that we will most likely not get rich panning for gold in Alabama, but we will have a blast. I am looking forward to the digging, sluicing and panning since I have never been gold prospecting. No date has been set for the club trip but we will let everyone know when a trip gets finalized.

We will be having a meeting on the 27th. It is a holiday weekend so some folks will be traveling. For those who will be out of the area celebrating Memorial Day, have a great time and be safe. For those who will be attending the meeting, I would like for us to pick the dates for our bracelet, cabbing and beading classes that we are substituting for the summer socials. Hope to see everyone at the May meeting and don't forget to bring your recent finds/purchases/creations for Show and Tell.

Pat

Know your stone?

*The birthstone for **May** is **Emerald.** It is the green variety of Beryl and the most famous and valuable green gemstone. Pictured in the banner above are various natural forms and faceted shapes of this mineral.*

Source: http://www.minerals.net/gemstone/emerald_gemstone.aspx

Upcoming Shows

MAY 19 – 20	**Harrison County Gem & Mineral Society**	**Biloxi, MS**
JUN 3 – 4	**Alabama Mineral & Lapidary Society**	**McCalla (Tannehill), AL**
JUN 3	**Greensboro Gem & Mineral Club**	**Colfax, NC**

Source: http://www.amfed.org/sfms/club-shows-456.html

Meeting Minutes – April 2018 – by Secretary

Meeting Date: 4/22/2018

CALL TO ORDER AND OPEN: The meeting was called to order at 2:07 PM by President Pat LeDuc. There were 22 members and 1 dog, who is an honorary member. Also in attendance were Dan Harriger, along with his wife, Pat.

INTRODUCTORY REMARKS: Birthday wishes and happiness were wished, and our guest speaker for the day, Dan Harriger, was introduced. Dan is president of the North Alabama Chapter of the Gold Prospectors Association of America (http://www.goldprospectors.org/Community/Chapter-Map/Chapter-Home/ChapterId/CRAGAL) and was in town to speak to us about new laws in Alabama that affect Rockhounds and fossil/specimen collecting.

CORRESPONDENCE: We received a Thank You from Landmark Park for the contribution made in Esther Dunn's name. We had the usual AFMS Newsletter to share and Pat made an announcement regarding upcoming William Holland classes for late spring and into the summer.

MINUTES & TREASURER REPORT: Minutes from the February meeting were approved and seconded, as was the treasurer report.

TODAY'S SPEAKER: Dan Harriger gave a very informative and entertaining presentation about the changes and implications of regulations imposed by the Alabama Department of Conservation and Natural Resources, effective in September of 2016. The Club's meeting minutes are not the proper place for a lengthy recounting of the issue. Suffice it to say, the revised regulations as they currently stand, make no reasonable provision for amateur/hobby collectors of minerals, gems, fossils or artifacts. Fees and fines are set at a level that is oppressive even for commercial miners.

The initial concerns of the ADCNR were collecting done along waterways. The very definition of "waterways" used by the ADCNR is grossly at odds with the already strict Federal statutes. This broad definition of "waterways" coupled with a the broad definition of "collecting" and what items are banned from collecting, result in what are now enforceable regulations that make even casual Rockhounds criminals in the eyes of the ADCNR.

Until these regulations can be questioned and tested in the courts, all of us need to be careful about where and how and what we can, for now, properly and safely collect in Alabama. Remember, there is no provision for "Hobby" Collectors and warnings have been issued to members of other clubs by ADCNR enforcement officers.

As more information regarding this issue becomes available, it will be passed along to club members.

SHOW BUSINESS: None. Note: Turn in your lawn signs if you have not done so.

OLD BUSINESS: No Old Business was discussed during this meeting.

NEW BUSINESS: Pat floated the proposal of scheduling Summer Craft Workshops for the months of June, July and August.

FIELD TRIP REPORT: Updates on the next field trip offerings will be sent via email and posted on the website as details become available.

SHOW AND TELL: Arnie brought in a new display of cabs, and the participants of the recent field trip to Hogg Mine all displayed choice items.

Door Prize for this month went to Arnie Lambert.

-- Respectfully submitted by B. Fizzell

Learning Series: Tools for the Rockhound

Mineral Habits, Part 1

Habits are the distinctive form that mineral crystals may take in different geologic settings, for instance when growing in a free space or in a particular environment. Habit can be a strong clue to a mineral's identity. Here are 13 of the 23 most common examples of some of the most useful mineral habits. Note that "habit" also has a meaning for rocks.

Acicular Habit

Acicular means needlelike. This mineral is actinolite.

Amygdaloidal Habit

Amygdaloidal means almond-shaped, but it refers to the former gas bubbles in lava called amygdules, cavities that have become filled with various minerals.

Banded Habit

"Banded" is a broadly layered texture. This rhodochrosite specimen might be called stalactitic, lamellar, geode, or concentric if it were curved differently.

Bladed Habit

Bladed crystals are longer and thinner than tabular crystals but stubbier than acicular crystals. Kyanite is a common example. In rock shops, look for stibnite

Blocky Habit

A blocky habit is squarer than equant and shorter than prismatic. This mineral is pyrite on quartz.

Botryoidal Habit

In scientific Latin, botryoidal means "like grapes." Carbonate, sulfate and iron oxide minerals tend to have this habit. This specimen is barite.

Cruciform Habit

The cruciform (cross-shaped) habit is the result of twinning. Staurolite, shown here, is well known for favoring this habit.

Dendritic Habit

Dendritic means "like branches." It can refer to flat crystals, like those of manganese oxides, or three-dimensional forms like this specimen of native copper.

Drusy Habit

Druses are a type of opening inside rocks that are lined with projecting crystals. Amethyst, cut from geodes, is commonly sold in rock shops for its pretty drusy habit.

Encrusting Habit

Calcite, the main component of limestone, commonly dissolves to be deposited elsewhere as a crust. Chips in this specimen show how it coats the underlying rock.

Equant Habit

Crystals of nearly equal dimensions, like these pyrite crystals, are equant. Those on the left might be called blocky. Those on the right are pyritohedrons.

Fibrous Habit

Rutile is typically prismatic, but it can form whiskers as in this rutilated quartz. Curved or bent fibrous minerals are called capillary or filiform instead.

Geode

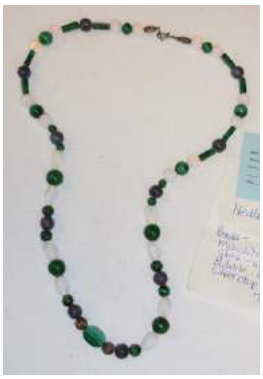
Geodes are rocks with open cores, or druses, lined with different minerals. Most geodes contain quartz or, as in this case, calcite with a drusy habit.

Source: http://geology.about.com/od/minerals/ss/mineral-habits.htm#showall

By Andrew Alden
Geology Expert

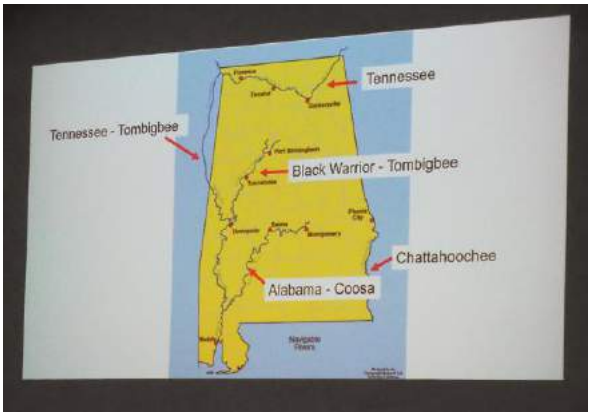
Club Meeting – April 2018

Photos by Pat & Bruce



Club Meeting – April 2018

Photos by Pat & Bruce



Kid's Corner

How Does Pressure Change Minerals?

The difference between quartz monzonite and gneiss is a lot of pressure. In this experiment we'll learn how pressure can make the minerals in a rock line up in the same direction and form bands and foliation, or thin leaf-like layers.

Problem:

What is foliation? What causes it?

Materials:

Lump of clay
Handful of long-grain or wild rice
Rolling pin
Rolling surface
Sample of quartz monzonite*
Sample of gneiss**

Procedure:

1. Flatten the lump of clay and then pinch it into a bowl shape.

2. Fill the "bowl" with the grains of rice and pinch the bowl shut so the rice is inside a ball.

3. Knead and squish the clay-and-rice until the rice grains are pretty much evenly distributed.

4. Compare it to the quartz monzonite sample. Like the quartz monzonite, the clay ball has been formed without too much pressure, so the grains go in every direction.

5. Now put the ball of clay on the rolling surface and roll it out flat.

6. Fold it over and roll it in the same direction. Keep folding it and rolling it flat again and again, in the same direction each time. After several minutes you should start to notice the rice grains are mostly pointing in the same direction, and may be forming bands and layers.

7. Compare the folded-and-flattened clay to the sample of gneiss. Like the clay, the gneiss has been compressed until the minerals in it tend to line up in the same direction and form layers.

*Monzonite is an igneous intrusive rock. It is composed of approximately equal amounts of plagioclase and alkali feldspar, with less than 5% quartz by weight. It may contain minor amounts of hornblende, biotite and other minerals.

**Gneiss is a common distributed type of rock formed by high-grade regional metamorphic processes from pre-existing formations that were originally either igneous or sedimentary rocks. It is often foliated.

MINERAL NAME SCRAMBLE

Here is a list of mineral names. The problem is, the letters are all mixed up.
Can you unscramble the mineral names? Be prepared: there are some tough ones here!

yttmaehs _____

bsoseats _____

eratbi _____

iilvoen _____

tpyire _____

yubr _____

fuuslr _____

ztpoa _____

zciorn _____

tnwueilfe _____

sttbinei _____

nratge _____

upsygu _____

ghpartei _____

letoufri _____

tatipae _____

rdalfeps _____

Source: http://www.kidsloverocks.com/pdf/Activity08.pdf

Answers: 1st column - amethyst, asbestos, barite, olivine, pyrite, ruby, sulfur, topaz, zircon, wulfenite, stibnite, garnet
2nd column - <error> Should have been "gypsum", graphite, fluorite, apatite, feldspar

Who What Where When Why How

May Birthdays

MAY 3 Brenda Spooner
MAY 4 Joe Polakoski
MAY 8 Laural Meints
MAY 14 Garry Shirah

Random Rock Facts

Minerals are divided into two classes based on what causes their color:

Idiochromatic – minerals whose color is determined by a coloring agent that is a regular part of the ideal chemical formula.

Allochromatic – minerals whose coloring agents are not part of the ideal chemical composition. To greatly simplify this exceptionally complex subject, here are the 4 most widely agreed upon causes of color in allochromatic minerals:

1. Impurities
2. Inclusions
3. Charge Transfer
4. Color centers

Source: www.treasuremountainmining.com/index.php?route=pavblog/blog&id=38

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
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Email: Tsavorite7@aol.com

Annual Dues

Single $15
Family $20

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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

MAY 27 – Potluck Refreshments

ROCKHOUNDS HERALD
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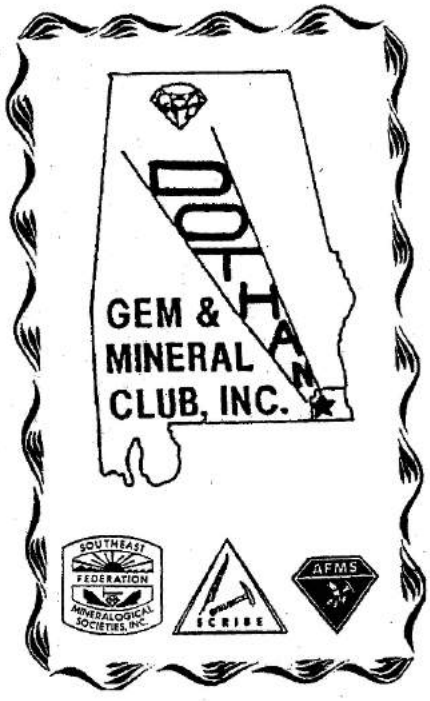

Where you might hear...

Some minerals always have the same color, because of the presence of certain elements in the mineral's normal molecular structure. For example:

Gold is yellow because the element Au absorbs all other colors except yellow.

Azurite is blue because the copper in azurite molecules absorbs all other colors except blue.

Crocoite is red-orange because the chromium in crocoite molecules absorbs all the other colors.

Source: www.treasuremountainmining.com/index.php?route=pavblog/blog&id=38

Member of
Southeast Federation of Mineralogical Societies, Inc.
American Federation of Mineralogical Societies