

# **THE ROCK RATTLER**



VOLUME 32 NO. 4

APRIL, 2007

PUBLISHED MONTHLY BY THE

**THE ARK-LA-TEX  
GEM AND MINERAL SOCIETY**

**PO BOX 3366  
BOSSIER CITY, LA. 71111**



**ROCKY**

## — — — — PRESIDENTS MESSAGE — — — —

Hello once again,  
I do hope that all of you are enjoying our wonderful spring. It is very beautiful this year!! It really makes one want to go rock hunting or develop a rock garden. I bordered a flower bed in some beautiful iron ore from Alan Graham. (Alan is one of our Chipalots.)

We have a new group of ladies who are doing beading. We are calling our group “The String Alongs.” We are planning on meeting in each others homes until we can secure a club building. Our next meeting will be April 9. We will meet at my house 200 Liberty Hill Dr. , Haughton. The time of the meeting is 6:30. Any one attending will need to bring any beading project and their own tools. It is such fun!!!!

Due to too much of a work load, Charlie Johns, our vice president is stepping down. I have appointed a very capable person , Ann Danowski to take his place. Ann is one of our beadlers and has graciously agreed to serve out the remainder of Charlies term. Thank you ,Ann. We will be greeting her at our next meeting.

This serves as a reminder that Ann will also be bringing us a very interesting and informative program at the next meeting. If you would like to learn more about jewelry and the care of jewelry, please plan to attend.

The show committee, which is headed by Charlie Johns and Bill Hart, had a very informative meeting last Sat.( Mar. 24) morning. The plans for the August show are coming along in a very fine manner. A big “thank you” to all in attendance.

I would like to ask all members who have a blue club vest, to please wear it to the next meeting. This will help the new members to see how the vests fit and purchase one if they so choose. It really presents a unified look if everyone has a vest...

O.K. that is about all for this time, I will turn this over to our very talented Editor.. See you at the meeting.... Take care—— Edna

### Shop Hint

#### **Spotting Cracks & Vugs**

To spot cracks and vugs before sawing, first soak it in a tub of water for at least an hour. Remove the rock and place it in a sunny spot. The surface will dry quickly, but the fractures and vugs will not. Use a soft pencil to mark the rock for guidance in sawing.

From Rockatier via SCFMS Newsletter 10/99

## March, 2007 Minutes

Joe Beasley is working with the Bossier School Board Properties Manager for potential locations for the Club to use. There are several properties available and will be evaluated for the Club's needs.

Be sure if you are interested in ordering a vest, you give the information to Bill Hart at the next meeting. Please, DO NOT WAIT until there is somewhere you wish to go to wearing the vests. They must be ordered and have several weeks lead time. The cost is approximately \$25 each.

Several ladies are thinking of starting a beading group. If you are interested, contact Edna House.

Respectfully submitted,

Gail George

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## Crystal Problems

By Cornelius S. Hurlbut, Jr.

When I first studied crystals  
I didn't have the knack  
Of three dimensional thinking.  
This skill I seemed to lack.

I'd turn and twist the crystal Around  
In hope that I could see  
At least one axis or a plane  
Of crystal symmetry.

The prism, pinacoid and dome,  
The rhombic pyramid  
All looked the same to me,  
No matter what I did.

But now I've studied long and hard,  
And think I'm somewhat wise,  
For in no length of time at all  
The cube I recognize.

From The Mineral Mite 1/99 via The Shin-Skinner Apr.03

## ANNOUNCEMENTS

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### UPCOMING SHOWS

**APRIL**

7-8 Abilene, Tx.

28-29 Waco, Tx.

**MAY**

26-27 Fort Worth, Tx.

Sign on to the internet at [www.rockngem.com/showdates.asp](http://www.rockngem.com/showdates.asp) for a complete listing of shows, contacts, addresses, etc

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### KNAPP-INS

<b>April:</b>	<b>6-8</b>	<b>Llano River,</b>	<b>Llano, Tx.</b>
	<b>20-22</b>	<b>S.W. La. (Nebletts Bluff)</b>	<b>Vinton, La.</b>
	<b>20-22</b>	<b>Old Fort Martin-Scott</b>	<b>Frederickburg, Tx.</b>
<b>May:</b>	<b>4-6</b>	<b>Water Creek</b>	<b>Yellville, Ark</b>
	<b>4-6</b>	<b>Old Stone Fort,</b>	<b>Tenn.</b>
	<b>16-20</b>	<b>Fort Osage</b>	<b>Boonville, Mo.</b>
	<b>25-28</b>	<b>Horshoe Bend Knappers</b>	<b>Weatherford, Tx.</b>

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### PROGRAM FOR APRIL

Ann Danowski

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### REFRESHMENTS

April	Pam Hendrix
May	
June	

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### DOOR PRIZE

April	James Hendrix
May	
June	

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### BIRTHDAYS

Emily Smith	March 31
Chelsea Holder	April 11

--- NOTICE ---

**PLEASE WEAR YOUR VEST TO THE MEETING - WE WILL BE MEASURING AND ORDERING VESTS FOR THOSE THAT WANT TO ORDER ONE.**

RULES FOR DEMONSTRATING/DISPLAYING AT THE ARK-LA-TEX  
GEM AND MINERAL SOCIETY ACTIVITIES/SHOWS

This document indicates guidelines for assisting the Show Committee in allowing all society members an opportunity to demonstrate their art/craft displays during society activities and the shows put on by the Society.

Space will be provided for each or a combination of each demonstrator or display by the Show Committee. This space will, or could be, an 8' X 4' table or as required for the demonstration. In the case of a display, the individual will be asked if they only require space or space plus a display case. The Society owns several (7) display cases. They will be assigned, first come first case, until they are filled. Once again, this is for planning purposes.

The Show Committee asked that there would be no selling of equipment or materials - even finished products - during the Society-sponsored activity. It would be permissible to take names of individuals or give the demonstrator's name to prospective clients and such for contact outside the Society-sponsored activity.

The individual interested in demonstrating must notify the Show Committee of his/her intention in advance of the planning meeting for an activity/show in order to establishing a floor plan. It is also asked by the Show Committee that those interested in demonstrating during an Ark-La-Tex-sponsored activity should donate \_\_\_\_\_ hours (FILL IN YOUR DONATED HOURS) to the Show Committee to perform duties at the Society Booth, such as in the Silent Auction, Children activities, selling tickets or the information booth. In doing this, the society activities will always be staffed sufficiently and not create a burden on others who do not care to demonstrate. It is assured that there are sufficient tasks to be performed and all can share. Donated hours should be a percentage of demonstrator hours.

This contract would only be binding for Demonstrators who demonstrate during an activity that has established dealers who are invited by the Society. This form will be made available to those interested individuals well in advance.

As stated earlier this is a planning document. If you would like to demonstrate or display, please sign and return to the Show Chairman well in advance of the floor-planning meeting.

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NAME OF INDIVIDUAL REQUESTING SPACE

DO YOU REQUIRE A SOCIETY-OWNED DISPLAY CASE FOR DISPLAYING OR DEMONSTRATING? YES\_\_\_ NO\_\_\_

IF YOU OWN YOUR DISPLAY CASE, HOW MUCH TABLE SPACE DO YOU REQUIRE? \_\_\_\_\_ FEET

DATE \_\_\_\_\_

## Jasper or Agate: A Simple Distinction

by Dave Olson

Jasper and agate are the rocks we hobbyists deal with most often in pursuit of our goals as lapidaries and collectors. Do we really understand the differences between the two? Often confusion arises when attempting to describe a specimen as either jasper or agate.

Both jasper and agate are composed of extremely fine interlocking quartz crystals called cryptocrystalline quartz. As such, they are both members of the fine-grained quartz family referred to as “chalcedony.” Chalcedony occurs throughout the world in beds, bands, nodules, geodes, botryoidal masses, as a replacement of fossils, wood tissues or other minerals, and as a cementing material. It is deposited from silica-rich waters, often carrying other mineral impurities.

It is the presence of these mineral impurities which stains the micro-quartz grains to produce the wide variety of colored patterns, banding effects and inclusions that differentiate the basic “gem” forms of cryptocrystalline quartz - jasper and agate - from ordinary drab chalcedony.

So what is the difference? In general, agate is a transparent to translucent form of chalcedony in which the coloration takes the form of regular bands, rings, clouds, wispy inclusions, or distinct groups.

Agate containing straight or concentric bands is referred to as fortification agate. Moss agate contains delicate wispy or lacy inclusions of coloring minerals, often the green mineral chlorite that penetrated cracks in the silica gel matrix prior to hardening. Now they remain as fine picturelike images. Agates are usually named by employing the geographical area where it is found with a descriptive adjective, as “Friday Ranch Plume Agate.”

Jasper, on the other hand, can be somewhat translucent, but it is most often opaque. The coloration of jasper is usually much darker than that of agate and is totally random with respect to pattern or distribution.

Finely divided hematite gives the color to reddish jaspers, and another iron mineral - goethite - is responsible for yellows and browns. Chlorite and nickel minerals contribute to green coloration. As with agate, jasper comes in many colors and displays an almost infinite variety of patterns. Because of these properties, it is an extremely versatile material for cabs, scenic “pictures” to be framed, and other functional and decorative purposes. It is truly the bread and butter “gem” of our hobby.

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### SHOP TIPS

If you want matched stones, put a piece of paper between two stones and glue together with mounting glue; then shape as desired in one grinding. A light tap with your hand will separate them.

*via Chip & Lick 6/01 via Michigan Gem News 8/01*

## The Two Faces of Jade

Jade, the most famous gem of the Orient, has always had an aura of mystery around it. It has been highly prized as a gem by the Chinese, Maori, Eskimo, and Middle American cultures. Geologists have unlocked the mysteries of its formation, and its particular association with Pacific Rim cultures.

Jade is actually two different minerals. One is nephrite jade, a member of the amphibole family. The other is jadeite, a member of the pyroxene group. The jade of Chinese antiquity is nephrite jade. After about 1780, however, jadeite from Burma was imported in abundance into China and became the most widely used jade there. The jade of the New Zealand Maori is nephrite while that of the Aztec is jadeite. The fact that there were two jade minerals was not known to science until 1860, when a French mineralogist named Damour examined some deeply colored jade brought to him from China and found that it did not match the physical and chemical properties of the well-studied nephrite. He called the new mineral "jadeite", thus introducing an unfortunate confusion whenever the topic of jade is discussed.

How does one tell nephrite from jadeite? Both types of jade are harder than a knife blade, fine-grained, translucent and colored in many shades of green, tan and brown. In a few cases, color can be a help. Very pale to nearly white jade is almost always nephrite. More boldly colored jade such as vivid malachite green, purple, blue or bright red is almost always jadeite. The colors are due to trace element impurities, such as iron, vanadium or manganese.

Some useful tests help distinguish jadeite from nephrite. A streak plate has a hardness of 6.5. Jadeite is harder than a streak plate, while nephrite is softer. Nephrite is less dense (3.0 grams/cc) compared to jadeite (3.3 grams/cc). Thus jadeite will sink in liquid methyl iodide, while nephrite will float. Jadeite will fuse relatively easily when hit with a blow torch flame, while nephrite will fuse only with great difficulty. This is obviously not a test to do on an antique! There are also subtle differences in appearance. Jadeite is glassier compared to a more waxy luster for nephrite. Nephrite is also tougher to break, even though it is softer on the Mohs' scale. This toughness is due to nephrite's internal structure which is made of many microscopic interlocking fibers put together like felt.

-Dr. Bill Cordua, U. Wisconsin- River Falls, in Leaverite News 1997 Rollin' Rock Feb. 2004

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### SHOP TIPS

Plain steel blades and blades that have had the diamonds worn off can be used to saw softer materials such as malachite, turquoise & azurite.

Source:

Quarry Quips via Rocky Tales - Lake

Havasu Gem and Mineral Society Dec. 2005

Nevada County Gem & Mineral Society  
The Formation of Geodes

By Sally Gwylan

Geodes are the mysterious treasure-boxes of the geological world. Undistinguished lumpy balls of rock from the outside, they often reveal crystal-lined interiors when cut or broken open. The crystals are most often clear quartz, although they are sometimes amethyst or calcite. Rarely, crystals of pyrite, sphalerite, and other minerals may also be found. Geodes may be less than an inch in diameter, though some, like the Brazilian amethyst cathedrals, can be several feet across. But some geodes, commonly referred to as duds, are empty. Others are solid crystal, or nearly so; these are called nodules. There's no way of telling what you will find in a particular geode from looking at the outside, although nodules are noticeably heavier than hollow geodes.

Geologists don't agree on the exact processes involved in the formation of geodes. Given that geodes form in both volcanic and sedimentary rocks under very different conditions, the subject is a complex one. But the most common theory is that geodes form inside already existing hollows within the rock. In the case of volcanic rock these hollows are the result of gas bubbles in the molten flow. Cavities in sedimentary rock may be the result of concretions, of an expansion in the rock due to internal fluid pressure, or of the dissolving out of earlier material by groundwater—or any combination of these causes.

Groundwater laden with silica and other minerals fills these hollows. Over hundreds to thousands of years minerals precipitate out of the water, leaving a silica gel on the interior walls of the cavity that hardens into rock as it dries. The first layer is usually chalcedony, a strong, crypto-crystalline form of quartz. As this process of mineral precipitation reoccurs over and over, later layers form distinct, inwardly pointing crystals. Geodes that are empty missed these later cycles. When a number of geodes are found together in a layer of rock, often it's the ones at the top—ones that were often above the level of the groundwater—that are duds.

A similar process of mineral precipitation can create crystal-lined cavities called vugs. The difference between one of these cavities and a geode is that the outer layer of a vug is not durable enough to survive weathering, so it disintegrates when exposed rather than forming a ball or rock with a crystalline mystery at its heart.

From CGMS News, March 2004 via ng&ms mar 2005

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Opalized wood is extremely brittle. Clamp it and slab it with care, exerting as little pressure as possible. This is a heat sensitive material and should be kept wet and cool at all times while working. A drum sander or horizontal lap works better for removing saw marks than grinding wheels. Cerium oxide, tin oxide, or Linde A on a moist felt buff will bring a mirror polish. It is not usually precious opal but do remember that opalized wood is opal.



The Ark-La-Tex Gem and Mineral Society meets at 6:30pm on the 1st Tuesday of each month at the: Bossier Parish History Center 2006 Beckett St Bossier City, La. 71111

FROM: ARK-LA-TEX GEM AND MINERAL  
BOX 6633  
BOSSIER CITY, LA. 71111

The Rock Rattler is a monthly publication of the Ark-La-Tex Gem and Mineral Society located in Bossier City/Shreveport, Louisiana. The society is affiliated with the American Federation of Mineralogical Societies (AFMS) and the South Central Federation of Mineralogical Societies (SCFMS). Permission is given to reproduce this document all or in part with proper credit given. Articles with no byline are by the editor.

The Ark-La-Tex Gem and Mineral Society is a nonprofit educational organization devoted to promoting interest in the various earth sciences, particularly the art of lapidaries and their related fields. Informational speeches presented at area schools and the presentation of awards and cash prizes at the Public School Earth Science Fair are two of the ways the society achieves its goals. Another contribution to the community is the annual show, held at the Bossier Civic Center, 620 Benton Road, in Bossier City. This "Jewelry Gem, & Mineral Show" functions as a fund raiser for our group and a venue for the demonstrations of gold and silver casting, jewelry making, bead stringing, faceting, cabochon making, and flint-knapping (the art of flaking stone tools such as arrowheads). The monthly meetings (including programs of interest to rockhounds), information from the Rock Rattler, and jewelry making classes through Bossier Parish Community College complete the educational objectives of the club.