THE ROCK RATTLER

2005-2006 Club Officers

President Edna House 949-9765

Vice-pres. John Autry 390-9200

Secretary Gail George

Treasurer Bill Hart 746-8735

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John Quade (2)
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Bill Hart
Charlie Johns (Co-chair)

Dealer Chairman

Joe Beasley

Rock Rattler Editor

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Haughton, La. 71037
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The Ark-La-tex Gem and Mineral Society meets at 6:30pm on the 1st Tueday of each month at the Bossier Parish History Center, 2006 Beckett St Bossier City, La. 71111

*******EDITORS NOTE*******

Please do not forget the June meeting**.** As you will be receiving the Rock Rattler somewhat earlier than usual, be sure and mark your calendar, tie a string to your finger, make yourself a note, or just ask your wife to remind you, but be there. ed.

PRESIDENT'S MESSAGE

I am working on getting a coffee cup for presentation to attendees of the 2006 SCFMS convention. They will be available for purchase by club members and other interested buyers. The cup will have the Club logo on one side, and " HOST, 2006 SCFMS SHOW" on the other side. We are also working to have a special SCFMS show host lapel pin for presentation to SCFMS guests, and will also, of course, be available for purchase by anyone interested. I would welcome any input from Club members as to what should be included on the pin. Send to me at the Rockrattler's e-mail,(wihouse@bellsouth.net.) Make sure and include my name in the subject line, so Wil does not delete it thinking that it is spam.

I am happy to announce that we have a new "telephone chairperson". It is Cheri Stewart. Be looking forward to her call.

A very interesting program will be presented by Okley Davis at the June meeting. It will cover the many different kinds of quartz related stones that are usuallly used in making jewelry. He will also be bringing some surplus Malacite that he will sell at his cost.

John Autry will be conducting the meeting, and I am sure that you all will have a good meeting. We will be looking forward to seeing you in July, when we will relate to you all of the exciting things that we saw and did while in Alaska.

Rock on - Edna

Non-destructive Method for Identifying Gemstone Origin

The origin of gemstones has been notoriously difficult to track but a recent development has made it possible to identify the country and even the mine a gemstone came from. Phillipe de Donato, a French scientist, presented this new technique at the December 2003 Materials Research Society meeting. De Donato has been able to discriminate between emeralds from ten different mines and seven countries, and also between synthetic and natural stones. His new method makes use of the fact that deuterium-oxygen bonds absorb specific wavelengths of infrared light. This non-destructive procedure produces an absorption spectrum which is characteristic of gemstones from certain locations. De Donato has obtained optical signatures of this type for a variety of emeralds; this method should resolve certain controversies surrounding historically important gemstones. Theoretically, this method should be applicable to any gemstone that contains water molecules.

Source: Science News, Vol. 164, Dec 13, 2003, via New Mexico Facetor's Guild 6/04

QUARTZ JEWELRY STONES

by Okley Davis

Quartz (silicon oxide) is one of the most common compounds. Overall, about 12 % of the earth's volume is quartz. It can be found in the obvious crystalline form, such as individual rock crystals, in almost every conceivable color, and weighing from a few carats to several hundred pounds. Clusters of individual crystals are also common. The crystals are hexagonal in shape, and have a hardness of 7 (which will scratch window glass). Some are so brilliant they may be mistaken as diamonds, (passed as real diamonds), or given such names as "Arkansas Diamonds", "Herkimer Diamonds", "Pecos Diamonds", etc.. In addition to the obvious crystalline forms, there are many microcrystalline forms, including agate, jasper, onyx, carnelian, chrysoprase, flint, chert, and many others. Let us look at a few of the common (mostly crystalline) types.

The most popular, and most expensive (though still costing around $10 per carat for the better grades) are Amethyst, Citrine, and Ametrine. Amethyst is the most popular and would be very expensive were it not so widely found. It is found in many places including Nambia, Brazil, Bolivia, and Russia. It takes on its lavender through purple color from manganese. The darker colors are the most desirable (and expensive), and are normally faceted. Lighter colored amethyst is often seen in the so called " cathedrals" or carved or cabbed. It is the state stone of South Carolina. In ancient times Amethyst was thought to quicken the wit, protect soldiers in battle, guard against contagious diseases, and bring peace of mind to wearers. Religious leaders believed it controlled evil thoughts and aided in ones spiritual development.

Citrine takes on its yellow to golden color from the presence of organic matter. Some natural Citrine is available, but is very expensive in over 10 carat sizes. Most citrine on the market is heat treated amethyst, or smoky quartz.

Ametrine is half Amethyst, and half Citrine. One side of the stone will be Amethyst in color; the other side is Citrine. It is found only in one mine in Bolivia. T:hough Amethyst, Citrine, and Ametrine are priced about the same, Ametrine might be the best investment because it is available from only one source.

Almost all of the remaining types for significant jewelry applications are much more reasonably priced than the big three, and are commonly used. In other applications - the crystalline forms especially - in wire wrapping. A good price for most crystalline forms would be $ 1.50 per carat. The non-crystalline forms vary in price by both the size of the cab and the material. Chrysoprase will be the most expensive. Rare forms of quartz, such as gold quartz, picture quartz, etc. may cost hundreds of dollars per stone. In all, you can probably find 40 or more types identified by the name "quartz".

Rose quartz gets its coloration from small amounts of titanium. The ancients believed it promoted gentle healing. Dreaming about Rose quartz was supposed to announce the arrival of one's true love. Depending upon the grade, Rose quartz can be found faceted, cabbed, carved, or even as just plain " yard rocks".

Smoky quartz contains small amounts of organic material. It is sometimes confused as Smoky Topaz. Heat treated may be like heat treated Amethyst or Citrine.

Rutilated quartz contains titanium dioxide. The rutiles appear as random small needles in the faceted or cabbed stone. Golden needles (or sometimes fan like inclusions) are the most common. Other variations include red or silver colored needles. Tourmalinated quartz contains inclusions of various shapes of sodium aluminum borosilicate. Cats eye quartz, like other cats eye gems, contains asbestos fibers. The cats eyes appear in a milky colored microcrystalline form of quartz. Finished stones will be in cabochon form . Strawberry quartz stones will also be in cabochon form. It, too, will be a milky microcrystalline type, with tiny black or red inclusions that look like strawberries.

Chrysoprase - another form of microcrystalline form of quartz - gets its color from small amounts of nickel in the stone. Quality Chrysoprase is pale lemon-yellow in color, and is translucent to almost transparent. It makes a very attractive cab for pendants, bracelets, etc. It also makes attractive carvings. The best quality Tanzanian rough is costly - about $100 per pound. A variant of the usual coloration is lemon chrysoprase: lemon in color, non-translucent, and containing surface inclusions.

Rock crystal quartz - the common colorless quartz - is attractive in itself, in either single crystals or cluster forms. Smaller crystals (for example the Herkimers) may be mounted in jewelry as is. Larger crystals are attractive in their native state, or mounted on unlighted or lighted stands. Books are available on the so designated metaphysical properties of quartz crystals. Quartz nodules may be sliced into slabs and epoxied onto thin slices of opal or other stones. The composite slab is then finished by using normal cabbing techniques. Prefinished cabs, in standard sizes, are also available.

A bit of trivia to conclude this paper. There are 12 stones of the zodiac; all but one are some form of quartz. Of the 12 recognized birth stones only one (Amethyst, for February) is quartz.

May 2006 Board Meeting Minutes

The Club is required to provide some sort of gift to each Federation table at the dinner on Saturday night. The gem trees by Pam and James Hendrix were a suggestion, but the number of trees required would be financially unfeasible. Edna is working on some other promotional item. The Federation has been unable to provide us a list of names for the dinner. The Federation has said they are taking over several things (silent auction) and will need help from the Club.

Bill issued a check for the *Scribe* for Wil. Bill indicated he needs to have a stamp made "For Deposit Only".

Jack Adams reported he had a quote for sandwiches for the dealers. This issue will be brought up for vote by members in July.

The menu selection for the dealer's dinner will be presented to the Club for a vote.

Respectfully submitted,

Gail George

May 2006 Minutes

Bill Hart gave an opal presentation and has written an article for the Rock Rattler.

Today is Jack and Cindi Adams' 25th wedding anniversary – Congratulations.

Duane Newton has joined as a new member.

Bill Hart reported on the Earth Day celebration at the Bossier Civic Center. There were approximately 200-300 fourth graders that came through the displays. There are discussions that next year the event will be a 2 day affair.

Menu selection for the dealer's dinner was brisket, salads and vegetables.

Charlie Johns brought some geodes for inspection and Gary Stewart brought a large geode made to look like Kermit the Frog.

Respectfully submitted,

Gail George

Will That Glass Ever Turn Purple?

If you just can't wait to find out, and don't have the time to leave your glass in the sunlight for a long time, just place it under a black light. If the glass fluoresces green, it will turn purple when exposed to the ultraviolet rays of the sun. This color change is due to the small amount of manganese which is added to the melted ingredients of sand, soda, and lime to free them from the ever-present traces of iron which gives the glass the common aqua color.

from Lapidarian 3/01, via The Pegmatite, 10/01, via The BackBender, 8/05

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 flintknapping (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.

UPCOMING SHOWS

JUNE:

16-18 COLORADO SPRINGS, CO.

2-4 PENSACOLA, FLA.

JULY:

1-2 Lake Ozark, Mo.

8-9 Bossier City Civic Center - Bead show

14-16 Houston International Gem and Jewelry show

AUGUST:

19-20 Ark-La-Tex Gem and Mineral show.
Hosting SCFMS

CLASSIFIED ADS

WANTED: agate, bloodstone, jasper, or any other slabs suitable for flintknapping. Dig through your jold box of slabs and contact me at " wihouse@bellsouth.net " or call me at 318-949-9765 Wil House (The first five people to contact me will get a prize)

FOR SALE: Surplus malacite - will sell at my cost. Okley Davis 318-949-2518

This space was reserved for "YOUR" ad.You must have sent it too late for me to get it in the RockRattler. ed.

DOOR PRIZES WILL BE PROVIDED BY

BILL HART -- FEBRUARY
OKLEY DAVIS -- MARCH
DON TALBOT -- APRIL
JOHN QUADE -- MAY
RED FLUITT -- JUNE
IKE HOUSE ---------JULY

REFRESHMENT SCHEDULE

FEBRUARY-------JOHNAUTRY
APRIL----------DON TALBOT
MAY-----------DAVID HOWARD
JUNE----------THE STEWARTS
JULY----------IKE HOUSE
AUGUST----
SEPTEMBER---PAM HENDRIX
NOVEMBER---

Note: March, October and December are special meetings, and "normal" refreshments will not be provided. Volunteers for open months are requested

ARK-LA-TEX GEM AND MINERAL MEMBERSHIP APPLICATION

Individual Membership $15.00 per year
Couple Membership $20.00 per year
Family Membership $25.00 per year

Mail to:
A rk-La-Tex Gem and Mineral Society
P.O. Box 6633
Bossier City, La. 71111

Name(s).....

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Address.....
Renewal?.....Phone(s).....Email.....
Membership option (check one) Individual:..... Couple:..... Family:.....