

St. Croix Rockhounds  
Doug Olson, Editor  
211 Interlachen Way  
Stillwater, MN 55082



## First Class

# September, 2003

Please send exchange bulletins to:

Doug Olson, Editor  
211 Interlachen Way  
Stillwater, MN 55082

**September 16<sup>th</sup>** - Is this month's meeting date.

The program is: **SILENT AUCTION**



St. Croix Rockhound's

## LEAVERITE NEWS

Vol. 28, Issue 6; September, 2003

Member of:



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# ST.CROIX ROCKHOUNDS

**MEETINGS:** Club meetings are held the third TUESDAY of each month, at Stonebridge Elementary School on W. Elm. St. in Stillwater, MN at 7:15 P.M.. Everyone is welcome.

**MEMBERSHIP:** Full membership for a single person over 16 is \$7.50 per year. Family membership is \$10.50 per year.

## OFFICERS:

President	Vic Martinsen	(715) 247-3700
Vice President	Dave Klinkhammer	(651) 776-8046
Secretary	Susan Dustin	(651) 430-3933
Treasurer	Elaine Martinsen	(715) 247-3700
Program Committee	Pete Rodewald	(715) 425-5561
	Bill Cordua	(715) 425-9544
	Victor Martinson	(715) 247-3700
Show Committee	Bill Cordua	(715) 425-9544
	LeRoy Betlach	(715) 425-5948
Refreshments	Freya Kask	(651) 777-6371
Librarian	Helen & LeRoy Betlach	(715) 425-5948
Historian	John Parsons	(651) 257-2724
Sunshine Committee	Marie Newlander MN	(651) 439-7809
	Esther Rodewald WI	(715) 425-5561
Tour Directors	Vi D'Angelo	(651) 665-9067
Liaison Officer	Freya Kask	(651) 777-6371
Newsletter Editor	Doug Olson	(651) 430-9035

The purpose of our organization is to bring together rock and mineral enthusiasts on a regular basis through membership and through pooling of individual knowledge, talents and skills, to improve the lapidary skills of participating members. Affiliation: American Federation of Mineralogical Societies and Midwest Federation of Mineralogical and Geological Societies.

## COMING UP!

**September 16<sup>th</sup>** - The St. Croix Rockhounds club meeting at the Stonebridge Elementary School in Stillwater, MN starting at 7:15 pm. The program tonight will be Silent Auction – clean out those unwanted rocks and equipment and contribute to the club's main fundraiser.

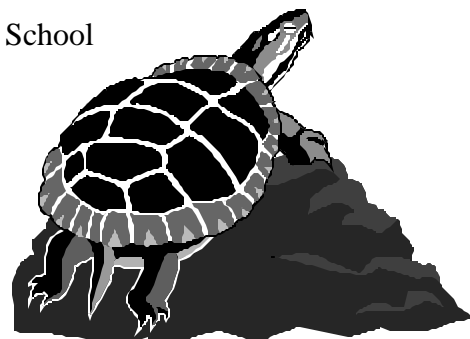
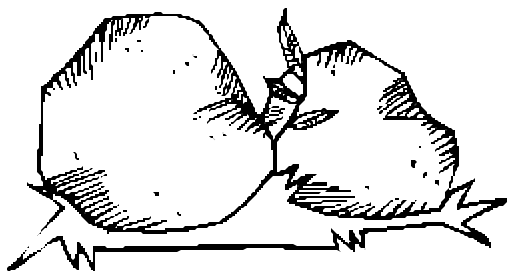
## COMING ATTRACTIONS.

**September 16<sup>th</sup>:** St. Croix Rockhounds meeting at Stonebridge Elementary School – SILENT AUCTION.

**October 4-5<sup>th</sup>:** Anoka County Gem and Mineral show at the Har Mar Mall.

**October 5-6<sup>th</sup>:** Southeast Federation Show

**October 21<sup>st</sup>:** St. Croix Rockhounds meeting at Stonebridge Elementary School



# Minutes of the Saint Croix RockHounds May 20, 2003

The May 20<sup>th</sup>, 2003 St. Croix Rockhounds meeting was called to order at 7:25 by President Vic Martinson.

Elaine Martinson's **treasurer's report** was approved as read.

**The minutes** of the April meeting were approved as published in the newsletter.

## Committee reports:

**Program:** The September meeting will be silent auction. The October meeting will be on fluorescence. The picnic will be in Bayport on the 23<sup>rd</sup> of August. A newsletter will be sent out notifying members of the final date and location for the picnic. The picnic is pot luck.

**Refreshments:** Thanks to Mike and Shari Frankenberg and Marie Newlander for bringing treats for tonight's meeting.

**Library:** The librarian, Helen brought a few books for tonight's meeting.

**Sunshine:** A card was sent around for members to sign for Esther Rodewald who is in a River Falls nursing home.

**Show:** Bill Cordua passed out certificates to those who participated in the club show in March. The Woodbury paper had a write-up about the show. It was voted to hold the next show in early April coinciding with the mall's visit by the Easter bunny.

**New Business:** Dave Klinkhammer opened discussion on the disbanding of the 3-M rock hound club. He wanted us to write to the active members to invite them to join our club. Our club liason officer (Freya Kask) is going to contact them.

The meeting was adjourned at 7:45 pm.

**Respectfully submitted,** Sheri Frankenberg  
secretary pro-tem.



## Celebrate!

**September's birthstone – Sapphire.** The sapphire was said to represent the purity of the soul. Before and during the Middle Ages, it was worn by priests as protection from impure thoughts and temptations of the flesh. Medieval kings of Europe valued these stones for rings and brooches, believing that it protected them from harm and envy. Warriors presented their young wives with sapphire necklaces so they would remain faithful. It was believed that the stone's color would darken if worn by an adulterer or adulteress, or by an unworthy person.

Sapphires were once believed to be protection against snakes. It was said that if poisonous reptiles and spiders were placed in a jar containing the stone, the creatures would immediately die.

## September birthdays:

Helen Betlach – 3<sup>rd</sup>

Freya Kask – 11<sup>th</sup>

Pete Rodewald – 13<sup>th</sup>

Elaine Martinsen – 15<sup>th</sup>

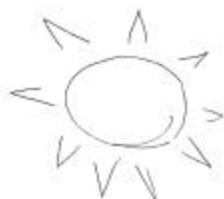
Victor Martinsen – 25<sup>th</sup>

## September Anniversaries:

Leroy & Helen Betlach – 12th

No news!!

If you have news – good or bad - please call Marie at (651) 439-7809.



# What are those fibers in my rose quartz?

Most of us are curious about the variety of colors in quartz. Rose quartz is one of the loveliest types, and many of us have specimens or jewelry of rose quartz. What accounts for its delicate pink color? Recent work has shed some light on its origin - apparently it is due to the presence of a close relative of the mineral dumortierite.

The breakthrough discovery was work done in 1987 by 2 geologists at the University of Missouri at Columbia, Ken Appin and Brian Hicks. They were doing studies on the etching of various types of quartz. They discovered in one of their samples, a rose quartz from the Ruby Range of Montana, masses of pink fibers on the sample's surfaces after etching in hydrofluoric acid. The color of the fibers was spectrally the same as the pink color of the quartz specimen. Testing by X-Ray diffraction convinced them that the fibers were a mineral called dumortierite, and that they were responsible for the pink color of that particular quartz.

Dumortierite is a complex boron-bearing silicate. It was named for a French paleontologist, and has been known as a mineral since 1881. It is generally found in fibrous to columnar aggregates and is usually an attractive pink to blue to purple in color. The particular concentration of trace amounts of iron and titanium seems to control the color seen.

Dumortierite often is found in granite pegmatites, high temperature hydrothermal veins, and in high-grade regional metamorphic rocks where boron was available during metamorphism. Sometimes interesting collector specimens occur from Maine, California, New Mexico and elsewhere. Lapidary quality dumortierite occurs in South Africa and other locations.

Appin and Hicks' work was followed by Julie Goreva, Chi Ma and George Rossman at Cal Tech. In a paper published in 2001, they looked for pink fibrous material in rose quartz from 29 localities from around the world. All of the samples they tested had such fibers. The fibers were very small, best described as "nano-fibers" 0.1 to 0.5 micro-meters wide (about 0.00002 inches). Their optical patterns again matched the pink color of rose quartz. X-Ray diffraction, Raman spectroscopy and other analytical tests showed that these fibers were from a mineral close to, but not exactly like, dumortierite. The scientists concluded the rose color of all massive rose quartz was due to this material.

Later work by this same team further characterized this material as a dumortierite relative. The only significant difference is the relatively large amount of iron replacing aluminum at a particular location in the mineral's structure. Whether or not this will constitute a new mineral remains to be seen.

At this point then it is hard to tell some one exactly what this material is. Yes, it is like dumortierite, but really isn't technically, and doesn't have an official name. I could suggest it be called "that pink fibrous dumortierite-like stuff in the rose quartz". A bit unwieldy, but, (to paraphrase the Bard), to a mineral collector, wouldn't the coloring agent of rose quartz by any other name, still look so sweet?

- Bill Cordua, U. Wisconsin - River Falls

## References:

Appin, Kenneth and Brian Hicks, 1987, "Fibers of dumortierite in quartz", *American Mineralogist*, v. 72, p. 170-172.

Goreva, Julia, Chi Ma and George Rossman, 2001, "Fibrous nano-inclusions in massive rose quartz: The organ of rose coloration", *American Mineralogist*, v. 86, p. 466-472.

Ma, Chi, Julia Goreva and George Rossman, 2002, "Fibrous nano-inclusions in massive rose quartz: HRTEM and AEM investigations", *American Mineralogist*, v. 87, p 269-276.

An Anagram, as you all know, is a word or phrase made by transposing or rearranging the letters of another word or phrase. No letters can be used twice or left out.

The following ones are exceptionally clever (someone out there either has \*way\* too much time on their hands or is deadly at Scrabble):

<b>Word/Phrase</b>	<b>Anagram</b>
Dormitory	Dirty Room
Evangelist	Evil's Agent
Desperation	A Rope Ends It
The Morse Code	Here Come Dots
Slot Machines	Cash Lost in 'em
Animosity	Is No Amity
Mother-in-law	Woman Hitler
Snooze Alarms	Alas! No More Z's
Alec Guinness	Genuine Class
Semolina	Is No Meal
The Public Art Galleries	Large Picture Halls, I Bet
A Decimal Point	I'm a Dot in Place
The Earthquakes	That Queer Shake
Eleven plus two	Twelve plus one
Contradiction	Accord not in it

**This one is \*truly\* amazing:**

"To be or not to be: that is the question, whether its nobler in the mind to suffer the slings and arrows of outrageous fortune."

**ANAGRAM:**

"In one of the Bard's best-thought-of tragedies, our insistent hero, Hamlet, queries on two fronts about how life turns rotten."

**And for a contemporary one:**

"That's one small step for a man, one giant leap for mankind."

(Neil Armstrong, on the moon)

**ANAGRAM:**

"A thin man ran; makes a large stride, left planet, pins flag on moon! On to Mars!"

--- Daily Funny

## Fun Fluorite Facts:

- When placed under an ultraviolet light, fluorite will fluoresce a variety of different colors. The Fluorite rock under a UV light can look drastically different from the way it appears in daylight.
- You may not realize it, but you use fluorite 2-3 times a day. How? Fluoride is ever-present as an active ingredient in toothpaste. However, fluoride is actively paired with an element of salt to become sodium fluoride. Fluoride is "added to toothpaste to fortify the teeth and reduce the incidence of tooth decay." (Holden, Mark. The Encyclopedia of Gemstones and Minerals.) fluoride is added to our drinking water in great quantities for the same reason it is added to toothpaste.
- You also use fluorite when you do your laundry. There are fluorescent chemicals present in the laundry detergents that we use to whiten our clothes. When ultraviolet light shines on a white t-shirt, it glows a very bright white color.
- Fluorescent mineral chemical are also at work for you in the post office.  
"Airmail stamps are printed with an invisible ink which fluoresces one color, and the regular mail stamps are printed with an ink that fluoresces another color. The mail, all mixed up, is run through a high speed sorting machine, which has photosensitive eyes to detect the color brought into the visible spectrum by the application of ultraviolet light. Those letters bearing stamps fluorescing one color are kicked into one bin while the others fluorescing another color are passed on into a second bin. Many thousands of man-hours each day are saved in the sorting of millions of pieces of mail." (Villard, Paul. Gemstones and Minerals. from *The Trilobite* 9/03

**New method for tumbling:** The writer believes that the following idea can take much of the work from the popular method of polishing rocks and gemstones by tumbling. All of the instructions we have seen state: "Wash stones and tumble very clean between each change of grit or final material" at the same time stating, "if liquid is too thick add slurp or grit from previously used material.

We know some will argue against our method but here goes: don't wash at all after each week of tumbling with grit! Start with t #50 grit, tumbling a week. Then DON'T EMPTY THE TUMBLER but add 5 teaspoons of new grit (one step finer) to the mixture in the three pound tumbler. Follow this procedure though #190, #320 and #600 grit. Now (finally) thoroughly wash the stones and tumbler before pre-polish and final polishing.

For a really glossy finish, take one or more weeks (after washing out the polishing powder) adding three spoons of sugar, one spoon (level) of Cascade or All or any non-sudsing detergent and add about ten drops of muriatic acid, if you have some, let stand one minute – open, then close tub and tumble for a week.

We have run eleven tubs using this method and found that even ordinary sandstone come out highly glossed. Except for the extra final steps, you save three washings and getting rid of the slurp each time. Save time, work and mess, and still get a better polish. *from Pineywoods Rooter via the Fractured Agate 8/03*

**To get a high polish on onyx** and other difficult to polish stones, go through the complete process of making your cab, from start to finish in the normal manner. Then, to get the high polish, mix 3 tablespoons of water with ½ teaspoon of oxalic acid in a wide mouth jar. Dip your cab in this mixture then go back to the polishing wheel. You will be surprised at the results. *from B.C. Newsletter & Bugle via Tulip City Conglomerates via Agate Explorer 8/03*

**How do you measure an ounce of grit?** Try this: use a standard measure teaspoon, fill with grit of any size, scrape with a flat surface, such as a knife blade or ruler, so that the spoon is filled flat from rim to rim, and voila! You have ¼ ounce of grit in the spoon. In general, it takes eight teaspoonfuls level for an ounce of polishing [note: there are 3 teaspoons in a tablespoon] polishing powder. *From Dusty Rocks 10/02 via the Show me Geode 2/03 via Rock Rollers Bulletin 1/03 via Chip n Lick 1/03 via Agate Explorer 8/03*

**If you are in a quandry**, wondering what to do with all of those bubble gum agates you picked up this summer, Shirley Ebbe has the answer. You use them to fill a lamp- this would qualify as a hurricane lamp, I understand, since it would take a hurricane to move it with all the agates contained within. *from the Rockhound News via Agate Explorer 8/03*



St. Croix Rockhounds silent auction at the regular club meeting – September 16<sup>th</sup> - 7:15 pm at the Stonebridge Elementary School in Stillwater, Minnesota. All are invited to attend!! Gather your extras/leftovers and any treasures you can bear to part with.