

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



December, 2003

**First Class**

Please send exchange bulletins to:

Doug Olson, Editor  
211 Interlachen Way  
Stillwater, MN 55082

**December 9<sup>th</sup>** - Is this month's meeting date.  
**Meeting at the Old Country Buffet  
at 6 pm in Maplewood**



St. Croix Rockhound's

**LEAVERITE NEWS**

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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	Peter 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!

**December 9<sup>th</sup>:** The St. Croix Rockhounds club special meeting at the Old Country Buffet near the Maplewood Mall at 6 pm. Pete Rodewald will present a program on agates. Election of officers for 2004 is also normally part of the December program.

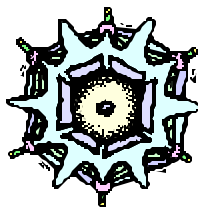
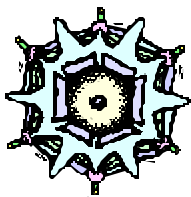
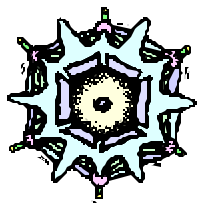
## COMING ATTRACTIONS.

**December 13-14<sup>th</sup>:** Anoka County Gem & Mineral Club Faribo West Mall Show in Faribault, MN

**January 19<sup>th</sup>:** St. Croix Rockhounds meeting at Stonebridge Elementary School at 7:15 pm

**April 3<sup>rd</sup>:** St Croix Rockhounds show at the Valley Creek Mall in Woodbury, MN

**April 23-25<sup>th</sup>:** 2004 Midwest Federation Convention and Show in Cedar Rapids IA. See [www.angelfire.com/ia3/cvrms](http://www.angelfire.com/ia3/cvrms) for information



# Minutes of the Saint Croix RockHounds November 18<sup>th</sup>, 2003

The meeting was called to order by President, Vic Martinsen at 7:25. The **Treasurer's report** was not available.

**Minutes** from the October meeting were approved as published in the Leaverite News.

## Committee Reports:

**Library**-Helen Betlach was not here.

**Program**-Pete will present a program on agates at the meeting at the Old Country Buffet. 2004 Midwest who will be at Cedar Rapids, IA April 23-25<sup>th</sup>.

**Show**- The club show will be April 3, 2004.

**Sunshine** – LeRoy is in United Hospital. We sent him a card and he is recovering.

The meeting was adjourned at 7:30 pm - in a hurry.

Door prizes were brought in by Vic Martinsen. Fluorite which fluoresces blue. Lucky winners were Mike Frankenberg, Lin Rawlings, Doug Olson and June Shalander.

## Respectfully submitted,

Shari Frankenberg, Secretary pro-tem

## Celebrate!!! December now has three birthstones, turquoise, zircon and tanzanite (and a fourth – blue topaz on some lists).

Last year the AGTA (American Gem Trade Association) announced the first new “official” birthstone in 90 years. Demand in the United States for this elusive gemstone is now so strong, that according to the AGTA it is second in popularity only to Sapphire which it resembles. Tanzanite was discovered in the mid 60's in Merelani, Tanzania, and is a form of the mineral Zoisite which is often found in the ground in conjunction with rubies. Tanzanite is mined only in the large hilltop area where it was first found. Colorless Zoisite is orangy brown, and up to that time was overlooked as a useful gemstone. Accidental heating of this unattractive colorless mineral resulted in the change from orangy brown to a deep, beautiful shade of violet blue. This change of color was stable, prompting Tiffany and Company to debut this new version of Zoisite in the 1970's - naming it Tanzanite in honor of the country where it is found in small quantities. Tiffany & Co. is the sole source for the gem.

Who decides what the “official” birthstone list is? The most commonly accepted list was adopted in 1912 by the American National Association of Jewelers, which later evolved into the Jewelers of America. Jewelers of America (JA) is the national association for the retail jewelers. However, in spite of all the marketing propaganda by the gem dealers, ultimately it is the consumer that determines their acceptance.

## December birthdays:

Eloise Kimball - 1<sup>st</sup>

Robert Olson – 8<sup>th</sup>

Brad Bonse – 31<sup>st</sup>

Sandy Dustin - 31<sup>st</sup>

## December Anniversaries:

Avis & David Klinkhammer – 28<sup>th</sup>

LeRoy Betlach is in the hospital with heart problems. He is recovering and has received a card from the club.

Susan Dustin is visiting her son, Timothy and his girlfriend, Diya in Malaysia.

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



## Chimps, Humans Should Share Genus Apes, Monkeys Traditionally Separate From Humans In Family Trees

Researchers in Detroit say humans are only slightly remodeled versions of chimpanzees -- and chimps are more closely related to people than to gorillas or other monkeys.

Morris Goodman and his team of researchers at Wayne State University School of Medicine also say chimps should be included in the human branch of the family tree.

Chimpanzees, gorillas and other apes have traditionally been separated from humans in taxonomic schemes. Currently, humans are alone in the genus *Homo*, but research done by Goodman and his team says humans and chimps share 99.4 percent of their DNA.

Next on the tree are gorillas, then orangutans, followed by Old World monkeys.

The researchers estimate that humans and chimpanzees diverged from a common ancestor roughly 5 to 6 million years ago. This common ancestor, in turn, diverged from gorillas about 6 to 7 million years ago. It's likely to spark renewed debate about evolution and the relationship between humans and animals. *from Channel 4000 news via AP*

### Makes Sense to Me

- Save the whales, collect the whole set.
- A day without sunshine is like, night.
- On the other hand, you have different fingers.
- I just got lost in thought. It was unfamiliar territory.
- 99 percent of lawyers give the rest a bad name.
- I feel like I'm diagonally parked in a parallel universe.
- I wonder how much deeper the ocean would be without sponges.
- Honk if you love peace and quiet.
- Remember half the people you know are below average.
- Despite the cost of living, have you noticed how popular it remains?
- He who laughs last thinks slowest.
- Depression is merely anger without enthusiasm.
- Eagles may soar but weasels don't get sucked into jet engines.
- The early bird may get the worm, but the second mouse gets the cheese.
- I intend to live forever, so far so good.
- Borrow money from a pessimist, they don't expect to get it

## India Deccan Plateau Zeolites – What are Zeolites?

By Pete Rodewald with editing by William S.  
Cordua P.H.D.

There are 16 major mineral classes, the ZEOLITES belong to the largest of these, the SILICATES, which comprise one third of all minerals. The silicates are sub-classed structurally, then further chemically, into six groups. They're listed below with mineral examples. Silicate groupings result from silicon-oxygen tetrahedron framework arrangements which are affected by arrays of elements. The 6 groups are (with India minerals in *italics*):

- 1) **NESOSILICATES** – tetrahedrons in isolated groups. Mineral examples are the olivine series, *garnets* and the aluminum silicates: kyanite, andalusite, sillimanite and topaz.
- 2) **INOSILICATES** – single and double tetrahedron chains of indefinite length. Mineral examples are the amphiboles, pyroxenes and pyroxenoid *bibingtonite*.
- 3) **SOROSILICATES** – double tetrahedron cluster which include hemimorphite, *prehnite*, *pumpellyite* and epidotes.
- 4) **CYCLOSILICATES** – curving tetrahedron groups creating closed ring patterns. Illustrated by 3-group rings, (the benitoite group), the 4-group rings, (the axinites and datolite of the borosilicate chemical group), and the 6-group rings featuring beryls and tourmalines.
- 5) **PHYLLOSILICATES** – (prefix phyllo means leaf) tetrahedrons in sheets, mica group and *gyrolite*, *apophyllite*, pyrophyllite and talc.
- 6) **TEKTOSILICATES** – three dimensional frameworks. Tektosilicates are broken down further into three groups.
  - 1) Silica group – represented by *quartz*, *crystalite*, and opal.
  - 2) Feldspar group – represented by the *feldspars* which are aluminum silicates.
  - 3) Zeolite group – zeolites are aluminosilicates

...article continued on the next page.

ZEOLITES, excepting *Laumontite*, can dehydrate and re-hydrate without structural change atomically. There is molecular space for much water in their framework. With adequate water present they are mineralogically unique in their ability to exchange calcium for sodium and sodium for calcium. This ability is utilized by industry technology for the manufacture of water softeners and medical dialysis. Interestingly, *Laumontite* is unlike other zeolites as it has no ability to absorb water of any amount once it dehydrates. When water vacates a *laumontite* molecule, its structure alters and falters. There is no longer any space for water in its atomic structure. *Laumontite's* original structure is that of a zeolite, but unlike other zeolites it can not re-hydrate.

India's Zeolites and properties are as follow:

- **Stilbite** – hydrous calcium-sodium alumino-silicate
- **Laumontite** – exceptionally hydrous calcium-sodium alumino-silicate
- **Chabazite** – hydrous calcium-sodium-potassium alumino-silicate
- **Analcime** – hydrous sodium alumino-silicate
- **Natrolite** – more hydrous sodium alumino-silicate
- **Scolecite** – hydrous calcium alumino-silicate
- **Mesolite** – hydrous sodium calcium alumino-silicate
- **Stellerite** – very hydrous calcium alumino-silicate
- **Levyne** – exceptionally hydrous sodium-potassium alumino-silicate
- **Heulandite** – ultra hydrous sodium-potassium alumino-silicate
- **Epistilbite** – hydrous calcium-sodium alumino-silicate
- **Clinoptilolite** – like heulandite, but less hydrous
- **Mordenite** – quite hydrous sodium-calcium-potassium alumino-silicate
- **Yugawaralite** – hydrous calcium alumino-silicate
- **Goosecreekite** – same as yugawaralite with one less water molecule
- **Thompsonite** – hydrous calcium sodium alumino-silicate

Non-zeolite minerals which are common associations to India zeolites (note: these associations occur due to chemistries which are similar to zeolites):

- **Prehnite** – calcium aluminum hydroxyl (Sorosilicate)
- **Apophyllite** – hydrous potassium-calcium-fluorine silicate (Phyllosilicate)
- **Quartz** – Silicon dioxide (Tektosilicate)
- **Pumpellyite** – hydrous calcium iron aluminum silicate hydroxyl (Sorosilicate)
- **Calcite** – calcium carbonate (Carbonates class)
- **Gyrolite** – hydrous sodium calcium aluminum silicate hydroxyl (Phyllosilicate)
- **Okenite** – highly hydrous calcium silicate (Inosilicate)

Note that only the calcite is not part of the Silicate Class.

Terminologies used in this paper:

- Hydrous = water weakly bonded to molecules and are easily evaporated or driven off
- Hydroxyl = water strongly bonded to molecules
- Alumino-Silicate = aluminum and silicon substitute for each other in mineral
- Aluminum Silicate = aluminum and silicon are in mineral but do not substitute
- Potassium-Calcium-Sodium = elements which vary and substitute unpredictably in mineral

**Another use for disposable diapers:** Use disposable diapers (the cheapest kind) to protect carvings or minerals in transit. They come with their own fastening tapes and can be used over and over again and are good cushioning for fragile materials. *from The Rockytier, via Crack 'N Cab 9/94 via Stoney Statement website*

**Jade polish:** Another recipe for jade polish is to mix one tablespoon of tin oxide in one cup of vinegar and use it on a leather buff but avoid a dry buff while polishing. This produces a good polish on jade using a high or low speed. *Via Emerald Gem, and Rocky Review 12/94 via Stoney Statement website*

**Clean chalcedony roses:** To clean chalcedony roses, immerse in solution of AXION for at least 12 hours. Then rinse in cold water. *Via G..I. Nugget, and Rocky Review 12/94 via Stoney Statement website*

## SAFETY - HEART ATTACK SIGNS

**By Chuck McKie, CFMS Safety Chairman - 2003**

**Warning Signs:** Recognize these heart attack signals to save a life: Typically, in the movies or on TV, older men suffer from heart attacks - we watch them clutch their chests as they collapse to the ground in pain. In reality, heart attacks can strike anyone when damage to the heart, such as a lack of oxygen or blood, causes it to stop working. The American Red Cross is educating the public about heart attack signals so that they are prepared to respond to their family members, friends and co-workers in this potentially fatal situation.

**Signals of a heart attack:** Severe chest pain lasting 3-5 minutes that does not go away, or goes away and comes back. The pain may range from mild to an unbearable crushing sensation, and the victim may describe it as a pressure, squeezing, tightness or aching in the chest. The pain may spread to the arms, shoulders, neck, jaw or back and will become constant. Resting or taking medicine will not alleviate the pain. The victim may have trouble breathing - you will notice that their breathing is faster than normal and noisy. At this point, the body is trying to get much-needed oxygen to the heart. The victim's face may appear pale and damp with sweat, and the victim may become nauseous and dizzy.

### How can you help a heart attack victim?

- Recognize the signals of a heart attack.
- Make sure your family members, friends and co-workers are educated with the warning signs as well.
- Call 9-1-1 or the local emergency number immediately for help.
- Convince the victim to stop activity and rest; comfort the victim.
- Monitor the victim's condition and try to obtain additional information about their condition.
- Assist with medication, if prescribed.
- Be prepared to give CPR and to use an automated external defibrillator (AED).

To learn more about how to enroll in American Red Cross CPR and AED training courses. via the American Red Cross