

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



April 2008

First Class

Please send exchange bulletins to:

Doug Olson, Editor
211 Interlachen Way
Stillwater, MN 55082



April 15th – The Program is:

Iris Agate by Pete Rodewald

St. Croix Rockhound's

LEAVERITE NEWS

Vol. 33, Issue 4; April, 2008

Member of:



&



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	Pete Rodewald	(715) 425-5561
Vice President	Brad Bonse	(651) 439-6832
Secretary	Doug Olson	(651) 430-9035
Treasurer	Lin Rawlings	(651) 735-4691
Program Committee	Mark Rasmussen	(651) 275-0607
	Bill Cordua	(715) 425-9544
	Victor Martinsen	(715) 247-3700
Show Committee	Bill Cordua	(715) 425-9544
Refreshments	Freya Kask	(651) 777-6371
Librarian	June Young	(651) 429-3887
Historian	John Parsons	(651) 257-2724
Sunshine Committee	Marie Newlander MN	(651) 439-7809
Tour Director	Susan Dustin	(651) 430-3933
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! - April 15th: St Croix Rockhounds monthly meeting at Stonebridge Elementary School in Stillwater starting at 7:15 pm. The program will be a presentation on "Iris Agate" by Pete Rodewald.

COMING ATTRACTIONS

April 8th: Annual Silent Auction! Chicago Rocks & Mineral Society. Open to the public, no admission fee. . Salvation Army, 4056 N. Pulaski Avenue, Chicago, IL.

April 12-13th: Anoka county Gem & Mineral Club show at the Eisenhower Community Center, Hopkins MN.

April 15th: St Croix Rockhounds monthly meeting at Stonebridge Elementary School in Stillwater starting at 7:15 pm.

April 19-20: Chippewa Valley Gem & Mineral Soc, Eau Claire Expo Ctr, Lorch Ave off Hwy 93, Contact: Roger Goss, Rgoss@cool.net, 715-723-0196.

May 3-4th: Cuyuna Agate and Mineral Show at Aitkin High School. Call Kat Thomas at 218-678-3298 for information or e-mail katmoose@emily.net

May 20th: St Croix Rockhounds monthly meeting at Stonebridge Elementary School in Stillwater starting at 7:15 pm.

June 20-22nd : MWF convention in Lincoln, NE.

June 27-29th: California Federation Show in Ventura, CA

June 20-22nd: Northwest Federation Show in Ontario, OR

September 23-28th: AFMS/South Central Federation shows in Humble (Houston), TX.

October 31-Nov 2nd: Rocky Mountain Federation Show in Tulsa Oklahoma

**Minutes of the St Croix Rockhounds
March 18th, 2008**

There are no minutes.

Diamond Facts *from World Diamond Council*

An estimated 10 million people globally are directly or indirectly supported by the diamond industry.

The diamond mining industry generates over 40% of Namibia's annual export earnings.

Diamond revenues enable every child in Botswana to receive free education up to the age of 13

In July 2000, the global diamond industry announced its zero-tolerance policy towards conflict diamonds and continues to drive this policy.

Sierra Leone is now at peace and exported approximately \$142 million diamonds in 2005.

Approximately one million people are employed by the diamond industry in India.

Approximately \$8.4 billion worth of diamonds a year come from African countries.

More than 99% of diamonds are now from conflict free sources and traded under the UN-mandated Kimberley Process.

The revenue from diamonds is instrumental in the fight against the HIV/AIDS pandemic.

Under the Kimberley Process, rough diamonds can only be exported and imported when accompanied by a certificate from the exporting country.

The charity Jewelers for Children funds a community based care program for orphaned children in South Africa.

An estimated 65% of the world's diamonds come from African countries.

Today, 71 governments and the legitimate diamond industry are all committed and legally bound to eradicating conflict diamonds.

Diamonds account for 33% of the GDP (approximately \$3 billion) of Botswana. Since diamonds were discovered in Botswana, GDP annual growth rate has averaged 7%.

Birthstone for April - Diamond

The name "diamond" comes from the Greek word "adamas" which means unconquerable-suggesting the eternity of love. Diamonds are special gifts due to their glamour, rarity, durability and beauty.

Diamonds are usually colorless. However, brown, yellow, green, blue, pink, red, gray and black variations are also found depending on the impurities present.

Diamond was chosen as the state gem for Arkansas, because at that time it was the only diamond-producing state in the United States. Colorado now has commercial production, also. The Crater of Diamonds State Park, located in Murfreesboro, Arkansas, is the only place in the nation where you can dig for diamonds and keep what you find. More than 70,000 diamonds have been found there.

The Crater of Diamonds State Park is the eighth-largest diamond deposit in the world. Farmer John Huddleston, who owned the property, discovered the first diamond in 1906. In 1972, the property was purchased for development as a state park, and since then visitors have carried home over 18,000 diamonds. Although diamonds are the main attraction, other semi-precious gems and minerals can be found there.

Source: Deming Rock Chips April 2005

April Birthdays:

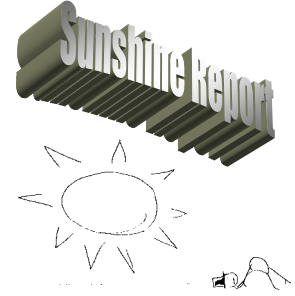
- Earl Kask 5th
- Wendy Flynn 15th
- Bill Cordua 21st
- Reuben Shaland
- Cassandra Olsor
- Dave Flynn 29th



April Anniversaries:

- Rodney Harvey 22nd
- Freya and Earl Kask 28th

Sunshine Report



Susan Dustin's dad died at age 90 on April 4.
if you have news - good or bad please call Marie at (651) 439-7809.

2008 St Croix Rockhounds Membership List



WAYNE SUKOW



WAYNE SUKOW

1	2	3
4" SQ. 5" COLOR QUANTITY 170 \$1.48 EA.	4" SQ. 5" COLOR QUANTITY 170 \$1.32 EA.	3" X 4" 5" COLOR QUANTITY 110 \$1.38 EA.
(IN LOTS UNDER 110 OR 170 THE COST WILL BE \$3.00 EA.)		



2008 Club Show Report *by Bill Cordua, Show chairman*

The St. Croix Rockhounds held their annual show on March 15, 2008 in the Valley Creek Mall in Woodbury, Minnesota. This was our eighth time in this location and, as usual, coincided with the Easter Bunny's visit. The mall was busy and lots of folks took in the club's 12 tables of displays.

Le Roy and Helen Betlach had two tables, most impressively showing the different stages in tumbling Lake Superior agates.

Brad Bonse had a display dominated by excellent Tampa Bay coral and float copper.

Bill Cordua showed a number of fossils collected on the latest club field tri to the Rohl Quarry north of river Falls. He had several UWRF students staff the club table and did rock, mineral and fossil identification..

Lyn Rawlings brought a bunch of sawn rocks for giveaways at the club table, As usual, this proved of great interest to the adults as well as the kids, and not a bit was left over at the end of the day.

Vic Martinsen had a large lighted display of excellent Shullsburg Wisconsin specimens. As it was dominated by galena, it must have been the heaviest display of the day.

Pete Rodewald had two tables with a variety of excellent specimens of minerals, meteorites and fossils. Most appropriate to the season was a dinosaur egg billed as "The world's first Easter egg".

Reuben Shalander brought many fine agates from the Lake Superior region and elsewhere, as well as Native American artifacts. He also had a book of photos from his extensive agate collection.

Gladys Weikert brought in 2 tables of cut and polished stones, spheres and jewelry.

The folks at Valley Creek Mall have already invited us back again next year. This year they made us some beautiful signs, helped with publicity and provided table, chairs and candy. We appreciate their help, especially that of Curtis Cruz, in making this event possible. Thanks to all those club members who helped by displaying and in the set-up and take-down!

(Pete Rodewald)



(Reuben Shalander)

(LeRoy and Helen Betlach)



Tumbling by Bob Hicks

Two methods of tumbling being discussed will be with the rotating tumbler. For both methods the grinding medium is silicon carbide.

The grits: (anything under Rough grit 100) is used for the first stage. Medium grit (120 to 300) is used in the second stage. Fine grit (400 to 600) is used for the third stage.

Estimating cost:

As a “rule of thumb,” silicon carbide, 220 to 400 grit weighs approximately 0.8 ounces per tablespoon. Fine grits 400 to 600 and polishing powders weigh approximately 0.5 ounces per tablespoon.

Weight your stones when you get your tumbler 2/3 to 3/4 full. For example, a six-pound tumbler does not always hold six pounds of rocks. As a rule of thumb, use 1 tablespoon of grit per pound of stones, or 1 tablespoon per two pounds of the manufacturer’s weight rating of the tumbler. Most tumbling books suggest more grit and polish than is really necessary.

Volume shrinkage: Roughly 25 percent of the beginning volume tumbled in step one will turn to mud, so run two loads of step one. This will provide the filler material to replace those that were ground away or thrown away from the first step.

Size and hardness of stones: A superior polish requires a variety of sizes, with emphasis on lots of small chips that help polish the larger stones. All stones in a load should be of the same approximate

hardness. Softer stones will not polish and may be gouged by harder stones.

A handy hint: Have a note pad next to the tumbler to record the date, time, and condition of the stones during the various steps and grit changes.

Polishes: There are many different polishes for the final stage. The best one for you will be determined by experimenting. Some of them are: Rapid 61, Aluminum Oxide, Cerium Oxide, Tin Oxide, Chrome Oxide, and Tripoli. Suggestion: Rapid 61, Cerium, or Tin Oxide.

Burnishing: Use a soap rinse between the 3rd cycle and polish, then after the final polish. Bar Ivory soap is the only pure soap we know of. Chemical additives in other soap and detergents seem to leave a residue on the stones. The dark color when this soap rinse is poured off shows how much grit were still on what you thought were clean stones. Shave the bar with a knife or whatever method you wish. The water-soap combination reaches a balance when little bubbles appear on the surface of the moving material and should remain this way throughout the soap cycles. The soap bubbles provide a cushion for the stones. Excess water slows the process.

CAUTIONS:

1. **Do not let the slurry mud dry on the material in any cycle.** If you goof and you have hardened mud, fill the tumbler with water and let it run until the mud has washed off or is soft enough to wash off with hose or faucet.

2. **Do not pour slurry down the sink,** (Unless you can afford lots of plumbing bills.)

3. **Some materials** like jade or obsidian require different procedures. *from The Rockhound Gazette, 02/97 via Stoney Statements 1/07*

How to use a Vibrating Flat Lap *by Steve Scarborough*

Setting up: Level the pan by adjusting the legs. Use a builder's level. Cross the pan in various directions.

Tighten pan and secure the machine so that it does not move and fall off the table or shelf. Use a cardboard box to shield the surrounding area from splashing grit.

Rock Prep: Lightly grind the edge of the rock to prevent chipping. Cover bottom of rock with Sharpie marker, white out or criss-cross with an aluminum scribe. If the rock absorbs the Sharpie ink, it will be hard to clean. Soaking overnight in denatured alcohol should help.

To prevent rocks from colliding, surround each rock with a bumper (made from old hoses or plastic tube held in circles around each rock.) or divide the tray into quarters with rubber hose. Be sure there is a bumper ring at pan edge. Small rocks may be separated by plastic beads.

Voids in the rocks can be filled with paraffin, shaved flat at the surface. The paraffin must be changed at each polishing stage. Remove it by dunking the rock in hot water to soften the wax. Then use a toothpick to remove the wax.

Rocks need to have sufficient mass (weight) to press against the grit. If they are too light, they will simply float on top of the slurry. You can use modeling clay or dop wax to attach another rock on top of the piece you are working. For slabs you can use a special lead weight designed for this purpose.

First grind: The first grind is used to remove any saw cut mark. If there are bad saw cuts, this stage may take a long time. If you have a good flat saw cut, this step can be skipped.

Begin with a slurry made with approximately 2 tablespoons 60/90 grit and water. Monitor the process by checking it at least once an hour. You may need to check it more frequently, depending on the ambient temperature and humidity. If more water is needed, try adding it with a hand sprayer. If the slurry feels smooth, add a little bit more grit to recharge it.

If you can't check the process (like when you're sleeping at night), turn the machine off. Do not let rock or pan dry out with the rock sitting flat in the pan. The slurry between the rock and pan surfaces will siphon out and the rock will adhere to the pan. If this happens, it can be dislodged by wetting the pan and the rock and running the lap.

Second grind: Thoroughly clean the lap pan and rock to remove any residual coarse grit. Use an aluminium scribe to remark the rock's surface.

The second grind stage generally takes less time, about 1 to 2 days. Soft materials will need considerably less time and must be closely watched.

Make a slurry using 220 grit and monitor the process by checking it at least once an hour.

Fine sanding: Again, thoroughly clean the lap pan and rock to remove any residual grit. Do not use an aluminum scribe at this stage as the scribe may scratch too deep. The fine sanding stage usually takes about 1 day. Make a slurry using 600 grit and monitor the process.

Polish: Again, thoroughly clean the lap pan and rock to remove any residual grit. Cover the pan bottom with polishing felt or leather.

Make a slurry using tin oxide or a combination of 1/3 cerium oxide with 2/3 tin oxide. Too much polishing material will cause foaming. When tin oxide foam creeps up the side of a geode it is difficult to remove the residue from the rough outer covering. *from Golden Spike News 12/07 via Rock Chips*

Stolen Gems *St Croix Rockhounds Leaverite News*

Vinegar, not just for salads: For the gloss finish on tiger-eye, polish once, dry the stone, then put a drop of vinegar on it. Let stand for a few minutes, then give it a second polish.

Mother-of-pearl kit inlay work can be softened by a soaking in white vinegar. It then can be easily cut.

Dark household vinegar will dissolve epoxy glue by soaking overnight.

Heard around the faceting table: spray vinegar on lap while polishing with water – or mix 50/50 water & vinegar in your water cup. This lowers the ph, giving a faster and better shine. *source Stone Age News via Deming Rock Chips 03/08*

To clean fern fossils do not use wax, shellac, varnish, lacquer or spray plastic because they cannot be readily removed and they destroy fine surface detail. Museums use yellow dextrin to bring out contrast and help preserve the specimen. Mix a little bit of the dextrin with water to the color of tea and paint it on the fern itself, not the matrix and it will stand out. *from Deming Rock Chips 03/08*

How to break rocks for tumbling is a question that comes up frequently since small sized rocks are not always available in the gemstone material you want. You can prepare the rocks yourself with a rock hammer or rock pick, small sledge, Eastwing's crack hammer or just a normal hammer and a heavy bag such as one made of denim. Bags can be made by sewing up an old Levi pants leg, a gunny sack, or a doubled up old pillow case. Fold the bag opening under, so no rock chips will fly out. Be sure to always wear safety glasses and gloves when crushing stone, especially when handling an removing the material from the bag, since the edges may be sharp. Some like to break the stones in a box, which will help corral the flying chips. If you have a corner to work in, this will also help corral the chips on at least two sides, while you hammer the chips on a hard piece of steel, andiron, etc. If you have several pieces of rock to break up, only place rock of the same hardness in the bag. You won't have to hit obsidian as hard as a piece of agate and you don't want the softer material completely crushed. Don not discard those very small fragments. Use them in your tumbler over and over again because they help speed up the tumbling process. All of these small chips are rubbing the grit on your rock in a multitude of places which speeds up the process of tumbling and make a smooth, shapely stone. Some rocks are more fragile or brittle, and for these stones, it may be best to slab in the approximate thickness you want, then with a hammer and chisel, break these slabs into sizes close to your preference. *from Deming Rock Chips 03/08*

Hair Spray: To find the picture in your slab to mark where you want to cut a cabochon you spray it with water, right. "Wrong"! Spray that slab with unscented hair spray. Spray them all and you can find one quick next time. It leaves a shiny smooth finish that is easily washed off.

Use hair spray on your display minerals too. It brings out the color and dust does not cling to them. That means less soaking in hot water to keep them clean. Be sure to use unscented spray, as the mineral seem to trap and intensify any perfume odor. *from Polished Slab 03/08*

Believe it or not! In Kings County, Washington, Big Foot has been placed on the endangered species list. If you visit the area, and are fortunate enough to catch him, it is illegal to harm him in any way! *from "The Montanans" 6/96 via ALAA. via Rockhound Ramblings 9/96 via Ventura Gemstones 07/98*

To open geodes soak a string in kerosene, tie it around the geode. Burn the string, then plunge the geode in cold water. In many cases this will crack the geode and a light tap with a hammer will finish the job. *from Rock Chips 10/2007*