

CEDAR VALLEY GEMS

CEDAR VALLEY ROCKS & MINERALS SOCIETY
CEDAR RAPIDS, IOWA

CEDAR VALLEY GEMS

DECEMBER 2011

VOL. 38, ISSUE 4

DECEMBER 13—HOLIDAY POTLUCK AND PARTY—6:00-?

Cedar Valley Rocks & Minerals Society will meet on **Tuesday, Dec. 13**, at Guaranty Bank, 300 80th Street Court, Fairfax. Access the bank from 151. From Cedar Rapids, take 151 toward Fairfax, about 3 miles from Westdale Mall. If you get to the Casey's, you've gone too far. Gather starting at 6:00.



Eat at 6:30. Bring a dish to share, your own table service and a nonperishable food item for the Christmas Baskets below. The club will provide drinks. Dell James is bringing turkey. Come and enjoy an evening of good conversations, good food, some of Bill Desmarais's fabulous sides, including "Christmas in the Rockies," a game of "A Minute to Win It" and door prizes. Door prize donation are also welcome.

Board Meeting: The next meeting will be held **Tuesday, January 3** at 7:15 pm at the home of Marv and Sue Houg.

CHRISTMAS BASKETS

Each year our club provides Christmas baskets for needy families through HACAP. This year we are supporting 2 families. We are required to provide 2 new gifts for each child and 1 for each adult in addition to a food basket. Below are the wish lists of Family 1—HACAP asks them to request 1 clothing and 1 non-clothing item of \$25 or less. If you can provide a gift, please call or email Marv or Sue Houg so we do not have duplicates: 364-2868; suzieq123h@yahoo.com

The second family is a single woman, but Sue has been unable to get in touch with her. Check the website later for her wish list.

We invite each person to bring a non-perishable food item to the December 13 holiday party for the food basket. A collection will be taken up to purchase additional food items to complete a holiday meal and to buy any presents that are not covered.

If you can't be at the party but would like to contribute, please send a check to Dale Stout. His address is on the back page. Any amount is welcome. We do not use club money for this project.

FAMILY 1	Age	Clothing Item	Non-Clothing Item	Items Purchased
Male	27	Long sleeve shirt, sz 6X	Slippers, sz 13	3 shirts, slippers
Female	27	Long sleeve shirt, sz 2X	Lotion set or Towels	2 shirts, towels
Female	6	Pajamas or long sleeve shirts, sz 6x-7	Barbie	Barbie, shirt, pjs
Male	4	Pajamas or long sleeve shirts or pants, sz. 5-6	Transformers and cars	Transf., car, shirt, pjs
Male	3	Long sleeve shirts and/or pants, sz. 4-6	Cars/book	Cars, book, shirt, pjs



Check your mailing label to see when your dues expire. Dues increased to \$15 per family per year starting now. If you paid in advance, no additional payment is necessary.

Please pay at a meeting or send dues to Dale Stout. His address is on the back of the newsletter.

RESULTS OF THE BEST FIND OF THE YEAR CONTEST

The club's 1st Best Find of the Year contest was held at the November meeting. Congratulations to the following who won their categories.



Mineral: Michelle Johnson
 Lake Superior Agate: AJ Johnson
 Fossil: Marv Houg
 Cab: Tom Whitlatch
 Jewelry: Julie Whitlatch
 Open Class: Julie Whitlatch
 Artifact: John Powelka

ROCKS WANTED

I am looking for rocks that people might have thought were geodes but are not. About softball size to basketball size. I'm making an astrological circle in our front yard in a landscaping project that has come about because of the need to add a mound of soil of at least 3 to 4 feet deep where we had to install a water line that couldn't go down a full 5'. If you know of anyone that has something, and needs to clean house, let me know. I talked to TJ about it and he thought he might have something, but I've not heard back. We don't need them until this spring. I've already started collecting. It's going to have all sorts of nice stones on the top as well and an iron gazebo with tons of flowers. . .right down this rock hound, flower nuts alley.

-Ivy Siever (elvira@pcpartner.net)

MSHA SAFETY TRAINING CLASS SCHEDULED FOR MARCH 15 PLEASE LET MARV KNOW IF YOU ARE INTERESTED



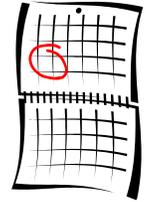
The club is paying expenses for John McCardle, Minneapolis, to come a day early for our March show and teach an MSHA-certified safety class on March 15, the Thursday before our show. The class lasts 2 hours, ends with a test required for certification, and will cost between \$20 and \$25 per person. John says that if you pay attention in class, you will be able to pass the test easily.

As quarries tighten admittance for rock hounds, MSHA (Mine Safety & Health Administration) safety training has enabled some people to access quarries that would not otherwise have let them in. We may require the training for some of our field trips in the future, or some of the quarries may require it. Certification is good for 1 year. We are encouraging members to get the certification.

If you are interested in taking the class, please notify Marv Houg (364-2868; m_houg@yahoo.com). Specify if you would like an afternoon or evening class.

HERE'S WHAT'S HAPPENING!

Event information included here is gathered from flyers, Exchange Bulletins, and the Internet
Please let me know of any that are missing



Jan 22: LINCOLN, NE, Annual Mid-winter Swap. Lincoln Gem & Mineral Club, Inc. Bethany Park Shelter House, Cotner & Vine Sts. Sat 1:00-5:00. Contact Lincoln Gem & Mineral Club, PO Box 5342, Lincoln, NE 68505; jna@inetnebr.com.

Mar 17-18: CEDAR RAPIDS, IA. Annual Gem, Mineral, and Fossil Show. Cedar Valley Rocks & Minerals Society. Hawkeye Downs, 4400 6th St SW, Cedar Rapids, IA. 8:30am to 6:00pm on Saturday; 9:30am to 5:00pm on Sunday. Info: www.cedarvalleyrockclub.org. Marv Houg: m_houg@yahoo.com.

Classes Offered Locally

Tom Whitlatch is offering classes on Thursdays from 6 to around 8 or so. The classes will range from all sorts of techniques to information. Included will be cabbing, silver smithing, wire-wrap, polishing, cutting—just about anything a person wishes. Contact Tom at 362-0864

HERE AND THERE WITH OUR MEMBERS AND FRIENDS

Please Send News Items via the Form on our Website
Or call Delores Slade, Sunshine Chair, at 319-351-5559



We Welcome New Members:

Deborah & Erik Meverden
2370 Tulip Ave
Ainsworth, IA 52201

Brian Pogue
1819 G St
Iowa City, IA 52240
319-358-9332

Eileen Stumpf
PO Box 264
Hills, IA 52235

Changes:

Joy & Bob Cummings
Joys phone-(319) 981 -2482
Bob's phone-(319) 981-2483
joybelle28@live.com



Our deepest sympathy to the family of Allyn Adams, who died unexpectedly November 11. Allyn was a long-time club member from the Quad Cities. He helped with club activities whenever he could and brought exhibits to the show for many years. His exhibits were always meticulously put together. A \$25 donation will be sent to Wickiup Hill in his memory.

INTERESTED IN A ROCK SWAP VIA UPS?

I'm with the Spring River Gem & Mineral Club in Cherokee Village, Arkansas. We would like to do a rock swap with your club, of mineral and/or fossil specimens. We do this with the flat rate USPS box of app \$11 (senior moment-- I forget exactly how much). We exchange a minimum of 10 lbs, with each specimen identified and wrapped individually. No leaverites, please, just reasonable specimens.

-Mary Kocz

(Please let Dale Stout know if you are interested in participating. See back page for contact info)

On the Rocks: The Science of Ice

By Heath Shive, Three Rivers Gem and Mineral Society, Fort Wayne, IN
From The Rock Rustler's News, Minnesota Mineral Club, Inc, Feb 2011



As many states still lie entrenched in winter's gloom, it might help to "know thine enemy."

(1) Ice and snow are technically minerals, just like quartz. They fit the official geological definition. And just like other minerals,...

(2) Ice and snow come in a variety of colors, depending on the impurities. Volcanic particulates of the Tambora Eruption of 1815 produced blue, brown and red snows in Maryland; and red and yellow snow in Taranto, Italy. In 2010 the Stavropol region of southern Russia experienced a light purple snow, attributed to Saharan dust. There has even been...

(3) Pin snow! Pink snow is regularly found in the Sierra Nevadas and is called "Watermelon Snow" due to its pink color. It even smells like watermelon (though you shouldn't eat it)! The color is the result of *Chlamydomonas nivalis*, a species of cold-loving green algae that has a secondary red carotenoid pigment (astaxanthin). But the true color of pure ice and snow is...

(4) Blue! Pure ice is blue, for some reason the sky and oceans are blue. Water absorbs more light from the red spectrum and reflects more blue. However, snow looks white because trapped air reflects back all light. If an ice cube doesn't look blue, it's because large quantities are required to make the effect obvious...and beautiful. But you don't want too much ice or otherwise we could have another...

(5) Ice Age! Starting about 2.5 million years ago (the Pleistocene Epoch), glaciers grew rapidly and spread across the world. At their peak, glaciers covered as much as 30% of Earth's current land area. Summer temperatures were 10°C (18°F) colder than present. Sea levels dropped by more than 90 meters (250 feet), resulting in an extra eighteen percent increase in dry land, in turn creating land bridges across the Bering Strait, the English Channel and Indonesia. The last Ice Age ended 15 thousand years ago, and the Pleistocene Epoch ended almost 12 thousand years ago. But to this day, no one is really sure...

(6) Why the Ice Age began in the first place! Theories abound. The foremost theory involves the Milankovitch cycles, a term for how the Earth's "wobble" (precession), axial tilt (obliquity), and planetary orbit (eccentricity) all vary with a regular cycle of every 20 thousand, 40 thousand and 100 thousand years respectively. Those variations affect how the Earth is exposed to the Sun's heat and radiation and could chill the planet. However, Milankovitch cycles have operated since the Earth was turning. But the Ice Age was a geologically recent event, only in the last couple million years. For the majority of Earth's history, the planet has been considerably warmer.

What else could have cooled the planet? Did the erosion of the newborn Himalayas absorb and remove vast quantities of carbon dioxide, an important greenhouse gas? Did the connection of the North and South American continents provide the catalyst? When the two continents joined, the Gulf Stream now carried much warmer and wetter waters farther north. This would increase precipitation (snow), and so increase glacier growth. Other scientists say that continental drift plays a factor, as Ice Ages don't really occur until there were large ice caps on the North and South Poles (which only occur when large landmasses are near the Poles to serve as climatic "anchors"). No one is certain how the Ice Ages were born, or if they'll return again.

In a way, it's much like our winters today. They come. They go. But humans have tackled winters (and worse) and we still survive. We have fought every crisis that Mother Nature brings to us. And we have what it takes to continue...or move to Florida.

Sources:

"Southern Russia overwhelmed with purple snow" RT. 9 March, 2011. 23 January, 2011. <<http://rt.com/news/prime-time/southern-russia-pink-snow/>>

Armstrong, W.P. 1987. "Watermelon Snow." **Environment Southwest** Number 517: 20-23.

Officer, Charles & Jake Page. Tales of the Earth: Paroxysms and Perturbations of the Blue Planet, New York City: Oxford University Press, 1993.

Fagan, Brian, ed. The Complete Ice Age: How Climate Change Shaped the World. New York City: Thames & Hudson, 2009.

Rafferty, John P., ed. The Cenozoic Era: Age of Mammals. New York City: Britannica Educational Publishing, 1022.

Rotary Flat Laps Vs. Wheels for Grinding, Shaping and Polishing Rocks

By Val Carver

From *The Rock Rustler's News* . Minnesota Mineral Club, Inc. Nov 2006. Marilyn Westman, publisher.

There are two basic types of machines available to shape, grind, sand and polish rocks. These are the vertical type wheel machines or the horizontal disc type of machines.

Regardless of the type of grinding/sanding agent being used, that being silicon carbide or diamonds, the following discussion applies equally to both of them.

The basic configuration of a wheeled arbor is that of one or several grinding or sanding wheels are lined up in a row sharing a common arbor shaft and driven by a common power source. Perhaps the most common name brand of this type of machine is the Diamond Pacific Genie. This type machine usually has several hard grind wheels for shaping the rock, one or several soft wheels for sanding and usually a vertical disc for polishing.

A rotary flat lap consists of a single interchangeable rotating horizontal disk. The disks have different-sized abrasives bonded to the top of the discs. The abrasives come in a variation of sizes from course to very ultra-fine, with the polishing being done on a disc charged with some type of polish compound. Currently the most popular of this type of machines is the Hi-Tech "All You Need" or the Ameritool "H.D. Universal." The shaping/sanding/polishing of the rock is done on the flat spinning disc surface with the disk being changed from abrasive grade to abrasive grade. For both types of machines you must constantly drip water onto the work surface.

The Wheel Machines are great for production work. Usually if you have a multi wheel machine,



you can move from grinding to sanding to polishing without stopping to change wheels. Please note, it is very hard to polish a true flat on a wheeled machine. Also, wheeled machines are strictly limited to the size of rock you can work on. Also note, the wheels are usually very close together and more likely than not, when operating a wheeled machine, you will trim your fingernails. Last, wheeled machines are bigger, heavier and cost more than an equivalent Rotary Flat Lap.

Rotary Flat Lap.

A small 6" diameter 2-wheeled silicon carbide machine can be had for about \$450.00, a 6" 6-wheel all-diamond Genie will cost about \$2,405.00, with an 8" 6-wheeled all-diamond machine will go in the range of \$2,100.00 to \$3,200.00

The Rotary Flat Lap is great for single piece work. It allows for true flat work as well as shape or contour work (I cut cabs on mine all the time). Rotary Flat Laps allow for much larger work to be done on them than an equal diameter Wheeled Arbor-type machine. Current Rotary Flat Laps are much more compact and lighter than a equal-sized wheel machine. Costwise, a complete 8" diameter all-diamond Rotary Flat Lap can be had for \$579.00

I guess my recommendation is that if you want to do production work, get a Wheeled Machine. If you want to do ones or twos or do true flat work, get a Rotary Flat Lap.

Honeybees Defy Dino-Killing “Nuclear Winter”?

From *The Rockfinder*. Michiana Gem & Mineral Soc.. Oct 2006. Tom Noe, ed.

The humble tropical honeybee may challenge the idea that a post-asteroid impact “nuclear winter” was a big player in the extinction of dinosaurs 65 million years ago. Somehow the tropical honeybee, *Cretotrigona prisca*, survived the end-Cretaceous extinction event, despite what many researchers believe was a years-long period of darkness and frigid temperatures caused by sunlight-blocking dust and smoke from the asteroid impact at Chicxulub. The survival of *Cretotrigona prisca* is problematic and telling, asserts paleontology graduate student Jacqueline M. Kozisek of the University of New Orleans.



Late Cretaceous tropical honeybees, preserved in amber, are almost identical to their modern relatives, she says. If no modern tropical honeybee could have survived years in the ark and cold without the flowering plants they lived off of, Kozisek reasoned, something must be amiss with the nuclear winter theory. “It couldn’t have been that huge,” says Kozisek of the Chicxulub-related temperature drops asserted by other researchers. Kozisek presented her work at the November 2006 Geological Society of America annual meeting in Denver.

Modern tropical honeybees have an optimal temperature range of 88 to 93 degrees F (31-34 degrees C) in order to maintain vital metabolic activities, according to entomological research, says Kozisek. That’s also the range that’s best for their food source: nectar-rich flowering plants. Based on what is known about the Cretaceous climate and modern tropical honeybees, Kozisek estimated that any post-

impact winter event could not have dropped temperatures more than 4 to 13 degrees F (2-7 degrees C) without wiping out the bees. Current nuclear winter theories from the Chicxulub impact estimate drops of 13 to 22 degrees F (7-12 degrees C) — to cold for tropical honeybees. “I’m not trying to say asteroid impact didn’t happen,”

says Kozisek. “I’m just trying to narrow down the effects.” To do this, Kozisek took a novel approach for a paleontologist. Instead of looking at what died out, she dug through the literature to find out what survived the massive extinction event. “I made a list of all survivors and picked those with strict survival requirements,” said Kozisek.

She determined what those survival requirements were by calling on studies of the closest modern analogues — which wasn’t always easy for some species, she pointed out. There was, for instance, a very early primate that crawled out of the Cretaceous alive, but there is really no comparable small primate around today with which to reliably compare, she said. On the other hand, a good number of tropical honeybees haven’t changed a lot in 65 million years, and a great deal is known about modern tropical honeybees’ tolerances to heat and cold. What’s more, amber-preserved specimens of the oldest tropical honey bee, *Cretotrigona prisca*, are almost indistinguishable from and are probably the ancestors of some modern tropical honeybees like *Dactylurina*, according to other studies cited by Kozisek.

An abstract of her paper is at:
<http://gsa.confex.com/gsa/2004AM/finalprogramabstract80171.htm>.

SHOP HINT—MINERAL CLEANER

From *Shawmish Roktawk*, 1/01



The denture cleaner Efferdent is an excellent cleaner for many minerals that are difficult to clean. Soaking specimens using this method should be very good for removing clay with a minimum of damage. Ordinary soaking is extremely slow and this should speed things up a bit. It is an excellent way to clean very delicate needle-like crystals which are impossible to scrub with a brush. With minerals that may be attacked by a minimum of acid (found in Efferdent), use distilled water for washing and soaking, as normal household water is contaminated with many chemicals, particularly salts of sodium, calcium and magnesium.

Annual Meeting, Resumed, Minutes—November 15, 2011

Call to order: 7:20 p.m. by Marv Houg, President

Minutes of last meeting: Motion to approve as written by Tom, Second by Michelle. Approved

Treasurer's report by Dale: Checking account total \$4260.79. Motion to approve by Leonard, second by Joy C. Approved

Correspondence: Dale has 2012 calendar order. If anyone wants one, see Dale. Cost \$7.50. Should be here by Christmas Party.

Monthly Program: Dr. Ray Anderson presented the hot breaking news about the New Madrid Earthquake

Door Prize: won by Michelle

Old Business: Christmas Party at Guaranty Bank, Fairfax, December 13. Note the change in date from regular meeting. Pot luck. Club will provide drinks and turkey Eat at 6:30. Bring your own place setting. Donation of door prizes gladly accepted.

New Business:

Election of Officers-2012

President-Marv Houg
Vice Pres-Bill Desmarais
Treasurer-Dale Stout
Secretary-Dell James
Editor-*****
Liaison-Joy Cummings
Director 2014 Tom Whitlatch
Historian-Leslie Blin
Webmaster-Sharon Sonleitner

No other nominations from the floor. Motion made by A.J. to close nominations, 2nd by Julie. Approved.

Nominations closed. Jeff K. volunteered for Hospitality chairman.

Motion made by John Powelka to accept slate of officers, 2nd by Cary Dixon. Approved slate of officers as presented.

General discussion followed: What can be done to improve the lot of the editor position? One option was the increased use of email. Majority approved but many do not have access to email and would elect to remain as is. Could the club cut back to less frequent newsletters and send out notifications of upcoming events by post-card/email? Consensus, people still rely on the newsletter. Website is a great asset but again people do not all have access. As of January 1, there will be no newsletter unless there is a volunteer willing to take on the position of editor. The issue remains undecided and more discussion to follow at board meeting.

Dues are due: Reminder that they have increased to \$15.00 annual fee.

Field Trip this weekend to St. Francisville: Details are in newsletter.

Misc: Blue Stone is closing down and they currently have 30% off on everything except tools. Located at 3136 Mt Vernon Rd. SE, Cedar Rapids.

Best Find of the Year Contest was conducted and tallied. Awards given.

Motion to adjourn by Jeff, second by A.J. Meeting adjourned at 9:40 pm

Respectfully submitted, Dell James, Secretary 

Officers, Directors, and Committee Chairs

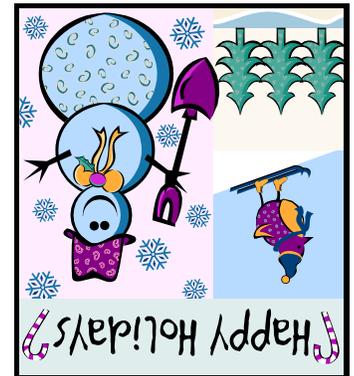
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Vice Pres.	Bill Desmarais <desmarais_3@msn.com>365-0612
Treasurer	Dale Stout <dhstout55@aol.com>365-7798
Secretary	Dell James <cycladelics@netins.net>446-7591
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Liaison	Joy Cummings.....981-2482
Imm. Past Pres.	Sharon Sonnleitner <sonnb@aol.com>396-4016
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Director '12	Leonard Moellers <leonardmoellers@yahoo.com>	721-1650
Director '13	Andrew Halfmann
Historian.....	Leslie Blin <bblin@bser.com>377-3339
Sunshine.....	Dolores Slade<dslade733@aol.com>351-5559
Hospitality	Jeff Kahl.....455-2201
Webmaster	Sharon Sonnleitner <sonnb@aol.com>396-4016

Cedar Valley Rocks and Minerals Society was organized for the purpose of studying the sciences of mineralogy, geology, and paleontology and the arts of lapidary and gemology. We are members of the Midwest (MWF) and American (AFMS) Federations. Membership is open to anyone who professes an interest in rocks and minerals.

Dues are \$15.00 per family per calendar year and can be sent to Dale Stout, 2237 Meadowbrook Dr. SE, Cedar Rapids, IA 52403.

Visit us at:
www.cedarvalleyrockclub.org

The club meetings are held the 3rd Tuesday of each month from September through November and from January through May at 7:15pm at the Rockwell Collins 35th St Plant Cafeteria, Cedar Rapids, IA. The December meeting is a Christmas dinner held on the usual meeting night. June, July, and August meetings are potlucks held at 6:30pm at area parks on the 3rd Tuesday of each month.



Sharon Sonnleitner, Interim Editor
 4800 Sunset Dr. SW
 Cedar Rapids, IA 52404