

CEDAR VALLEY GEMS

CEDAR VALLEY ROCKS & MINERALS SOCIETY CEDAR RAPIDS, IOWA

CEDAR VALLEY GEMS

APRIL 2014

Vol. 40, Issue 4

APRIL 15 MEETING - 7:00 PM

Regular April meeting Cedar Valley Rocks & Minerals Society will convene on **Tuesday**, **April 15 at 7:00 pm** at the Science Center.

<u>Program</u>: The U of Iowa scholarship winners will provide the program.

<u>Board Meeting</u>: The next meeting will be held **Tuesday**, **April 29** at 7:15 pm at the home of Marv and Sue Houg.

UPCOMING SHOWS & EVENTS

Fri -Sat April 11-12 Iowa Academy of Science 126th Annual meeting, Iowa Central Community College, Fort Dodge, Iowa www.iacad.org. GSI fieldtrip on Saturday – see article on page four.

Thurs. April 24 - U of I Natural History Museum, 7 pm Explorers Seminar Series: Greg McDonald National Park Service

Sun. April 27 - Cedar Rapids Science Center - 2pm, The Fossil Guy: "Climate, Extinction, & The Fossil Record"

Sat - Sun, Apr 26-27 - River Valley Rockhound Show, Iowa Central Community College, Fort Dodge, Iowa

Sat- Sun, Apr 26-27 Black Hawk Gem & Mineral Club Semi-Annual Show, Davenport, Iowa

Sun, Apr 27 - Black Hawk Gem & Mineral Society Show, Cedar Falls, Iowa



A young visitor is very excited to get his photo taken with the representation of a Juvenile T-rex at the 2014 Gem, Mineral & Fossil Show held at Hawkeye Downs Expo Center in Cedar Rapids, Iowa on March 15-16. More details from the show on page two.

Spring Show: April 26-27: Black Hawk Gem and Mineral Club: Rock, Gem and Jewelry Show, Clarion Hotel 5202 Brady St, Davenport, IA 52806 Sat. 9 am - 5 pm, Sun. 10 am -4 pm. The show features rocks, minerals, fossils, agates, geodes, tumbled stones, beads, silver and beaded jewelry, carved stones, spheres, arrowheads and much more.

Admission is free. For information call (563) 445-3034.

The Cedar Valley Rocks & Minerals Society does not discriminate as to race, sex, color, creed, national origin, or ethnic background.

A non-profit organization, (501,c-4), it is a member of The American Federation of Mineralogical Societies and The Midwest Federation of Mineralogical and Geological Societies.

Club meetings held at the new Science Center location: 5824 Council Street N.E. Cedar Rapids, Iowa

ALL THAT GLITTERS...GEM, MINERAL & FOSSIL SHOW REPORT by Sharon Sonnleitner

Congratulations to all who helped plan, work, and provide food for our 50th Gem, Mineral & Fossil Show, during March 15-16. This year's attendance of 5,963 and profit of about \$8,000 indicate it was a huge success.

A mom of two young girls who attended the show for the first time, told me they had "so much fun, just so much fun" at the show and they will definitely be back.

It takes a team effort to put on this event, and together, we make a great team.

So many things made the show the big draw that it was including:

- Juvenile T-rex, a spectacular exhibit where people were always taking pictures and looking from various angles to take in all aspects of the display. We are so grateful to Michael & Barbara Sincak for providing this exhibit. The Sincaks were unable to attend the show but sent staff in their place. We look forward to seeing both Michael and Barbara next year.
- Great exhibits. Although the gold (our theme) exhibits were sparse, others
 exhibitors provided unique specimens to look at, and all the exhibit space
 was filled
- Ryan Clark, from the Geological & Water Survey, was busy throughout the show answering people's questions and identifying specimens brought to the show.
- Wonderful programs from Ray Anderson (Gold), Ryan Clark (the NE Iowa Pluton), Hal Prior (History of Gold video presented so excellently by Don Rinner) and Gary Calvert (Opals).
- Varied and friendly dealers who were willing to answer any questions and provided quality products.
- Gem Flume, a huge draw for families.
- **Demonstrations** of gold panning, glass making, silversmithing, cabbing, wirewrapping, tumbling and geode cracking were big hits.
- Pebble Pit, Fossil Hunt, Bone Dig and Fossil Casts, where the workers interacted so well with the kids.
- Silent auction with all the donated items.
- Friendly, efficient front desk workers.

Friday night's potluck was a chance to visit while enjoying a plentiful spread of delicious dishes – about 75 people attended.

Saturday's catered dinner, with about 60 people in attendance, was another time to connect after a busy day.

During the show, many of us run into people we know from other organizations, school and work. We made them feel welcome and look forward to another successful show next year.



The Gem, Mineral & Fossil Show also serves as a time to reconnect with friends we see only once in a while. At lunch during set-up, Alberta Cray's sons brought her to see members she has not seen in a long time. She was able to make it back for both Saturday and Sunday to visit with others. Alberta is a 50-year member of the club.



Bill Desmarais at the Gem, Mineral & Fossil Show.



Fun at the bone dig.

2014 EASTERN IOWA SCIENCE & ENGINEERING FAIR WINNERS by Bill Sonnleitner

The Cedar Valley Rocks and Minerals Society continued its support of area science education by participating as a prize and donor sponsor of the 2014 Eastern Iowa Science & Engineering Fair. Unlike last year when there were no geology entries, a number of entries merited consideration for rock/mineral oriented projects this year.

Cash awards, along with certificates of accomplishment, were presented to the following participants on behalf of the Society:



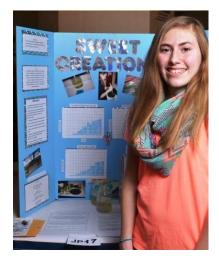
Justin Walte and Jake Cook

Justin Walte and Jake Cook from Central Lee High School (under the supervision of Arie Schiller) each received \$40 and a certificate for their first place Junior Team entrant "Viscosity of Lava". They were aware that the higher the silica content of the lava, the higher the viscosity.

They speculated that faster and further flow would result from lower viscosity lava versus higher.

Although they did not use actual heated lava, they produced higher versus lower viscosity semi-liquid mixtures, exuded them into and over a homemade volcano, to test their hypothesis, which turned out to be correct.

Kamyrn Bailey from Fort Madison Middle School (under the supervision of Arie Schiller) received \$30 and a second place Junior Physical certificate for her entrant "Sweet Crea-



Kamyrn Bailey from Fort Madison Middle School

tions," which speculated on the effects of the amount of light on crystal growth. From her observations of massive crystal growth in dark caves, she speculated that a darker environment would be more conducive to crystal growth than a lighter one.

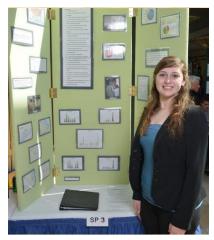
Contrary to her hypothesis, the sugar crystals she grew did better with more light. Perhaps the more lit areas she utilized were also warmer causing more evaporation and faster growth...you be the judge.

First place in the Senior Physical division was awarded to Mallory Wills from Central Lee High School (under the supervision of Alicia Schiller) for her "A Comparative Study of Radon Levels in Lee County".

She received \$50 and a first place certificate. She speculated that the levels of radon gas occurring in lowa basements are the result of the high level of agricultural stirring of the soil in lowa along with the relative solidness of the basements construction.

Radon gas forms from the decay of radium (and its isotopes), which in turn decays from a chain of elements/ isotopes starting with uranium.

Since the half-life of radon gas is only 3.8 days, versus radium's approximately 1,600 years, her study really was of the amount of radium in the soil around the construction site and probably not much effected by past agricultural activity.



Mallory Wills from Central Lee High School

According to Wikipedia, the high level of radium (and its decay predecessors) in lowa is the result of glaciation that ground the granite rocks from the Canadian Shelf and deposited the results as part of our rich lowa farmland.

In addition to these cash prizes, the Society donated \$40 for general use by the Eastern Iowa Science & Engineering Fair organization.

Cedar Valley Rocks & Minerals Society

Summer 2014 Picnics:

- June at Knollridge Park Cedar Rapids - Lapidary
- July at Squaw Creek
 Cedar Rapids Geode cracking
- August at Morgan Creek Cedar Rapids - Bingo

FIELD TRIP TO THE FORT DODGE FORMATION — SATURDAY, April 12

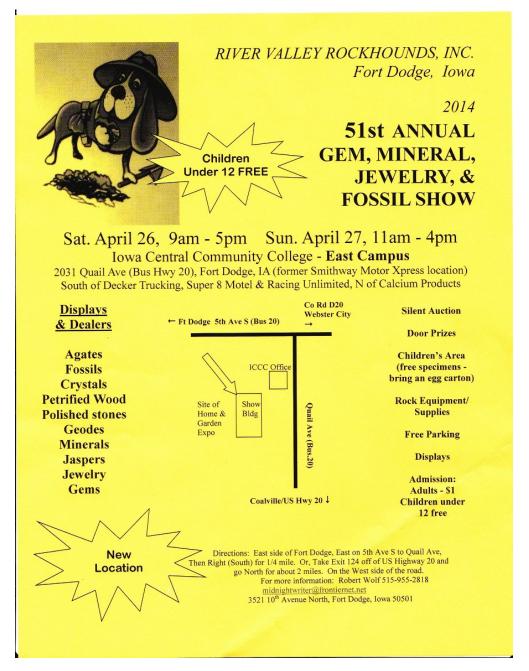
The Iowa Geological Survey is hosting the Geological Society of Iowa's 2014 Spring Field Trip on the afternoon of Saturday, April 12. The field trip will visit outcrops of the Jurassic "Soldier Creek Beds" and gypsum beds of the Fort Dodge Formation in Fort Dodge, Webster County, Iowa after the conclusion of the morning sections of the Iowa Academy of Science 126th Annual Meeting.

The trip will begin at 1:30 pm on the campus of lowa Central Community College in Fort Dodge. Please meet in parking lot L5 just southwest of the Bioscience and Health Science Building (ICCC campus map). Guidebooks will be provided to attendees, free of charge. Two of the field trip stops are on public land in Fort Dodge; hardhats will not be needed, and collecting is discouraged.

The fieldtrip will conclude at the US Gypsum Company quarry southeast of Fort Dodge. Hardhats will be necessary, so bring one if you have it, otherwise they will be provided. Collection in the quarry will be allowed as designated by the USG representative who will lead us to the quarry stop(s). As usual, dress for the weather conditions and have proper footwear for potentially muddy, rocky conditions in the quarry.

IMPORTANT

RSVP: ryan-j-clark@uiowa.edu by Friday (4/11/14) if you plan to attend.





Fort Dodge Formation gypsum unit with overlying glacial overburden as seen in the north working face of the US Gypsum Co. Flintkote Quarry in southeastern Fort Dodge, IA.

(Photo taken by Ryan J. Clark, on 3/18/14 and used with permission from US Gypsum Co.)



FIELD TRIP TO CONKLIN QUARRY—SUNDAY, May 4



A joint field trip with MAPS to Conklin Quarry, Coralville, has been scheduled for Sunday, May 4. Meet at the main entrance to Conklin at 8:45 am to sign in and get safety instructions. Enter the quarry at

9:00. This is a lock-in quarry; that is, the gate is locked, and no one can enter or leave (except in an emergency) until 12:30. The rest of the group will leave about 4:30 pm. If you plan to enter at noon, be sure to be at the gate about 12:15.

This is a "hard-rock" working quarry. Participants must have their Personal Protective Equipment, i.e. a Hard Hat, Sturdy Shoes and Safety Glasses & Safety Vest. Adults are responsible for their minor children at all times!

Stay Away From The High Walls at the Bottom and at the top - this will be strictly enforced!

Please Note: If you come with jelly shoes, sandals, etc. - you Will NOT be allowed to go in. Closed Toe

Sturdy Footwear is REQUIRED!

Possible finds include: coral heads, horn corals, brachiopods, bryozoans, trilobites, crinoids and maybe cephalopods, fish parts, and blastoids; millerite, calcite, pyrite, sphalerite. Useful tools include: rock hammers, cold chisels, sledges and pry bars. Bring your own water and lunch.

To save time, download and fill out the club **liability waiver** at www.cedarvalleyrockclub.org (all lower case).

Directions: Travel to I-80 in Iowa City/Coralville. The quarry entrance is just north of I-80 at exit #242 (1st Ave), across the street from the Hampton Inn parking lot.

Contact: Marv Houg, Phone: 319-364-2868,

Email: m houg@yahoo.com

A LOOK INSIDE IOWA'S STATE ROCK

By Brian J. Wizke, Iowa DNR—Iowa's renowned "Keokuk geodes" can be found in specific stream drainages and excavations in parts of southeastern Iowa (especially in Lee, Henry, and Van Buren Counties), including the area near Geode State Park. Most geodes are derived from strata of the Iower Warsaw Formation, a widespread rock unit of Mississippian age.

Muds deposited in a shallow sea about 340 million years ago were primarily calcium carbonate and clay, and were subsequently lithified to form the shales, shaley dolomites, and limestones that we see today. Fresh geodes can be dug out of exposures of the lower Warsaw Formation, where they are concentrated in certain layers.



Although the bulk of Iowa's geodes are derived from the Warsaw Formation, geodes also are known from other formations of Devonian and Mississippian age at scattered localities in eastern and central Iowa.

SPRING 2014 PROGRAMS AT UI PENTACREST MUSEUMS

Saturday, April 12—Macbride Auditorium (2nd Floor)
The Fossil Guy: "Veggiesauruses Large and
Small"

Don Johnson, "The Fossil Guy," brings hands-on children's programs on paleontology at 2:00pm on Saturday afternoons at the University of Iowa Museum of Natural History.

All "Fossil Guy" programs are free and open to the public and will be held in Macbride Hall auditorium. Each program consists of a 30-minute talk by Johnson, a local avocational paleontologist, followed by 30 minutes of hands-on interactive time with Don's collection of fossils and replicas. Presentations are geared toward elementary-age children.

Learn about a variety of plant-eating dinosaurs during this program. How were the duck-billed dinosaurs like Edmontosaurus, Maiasaura, and Parasaurolophus specially adapted for chewing their food? How were the horns and spikes on dinosaurs like Triceratops, Styracosaurus, Ankylosaurus, and Pachycephalosaurus used? What evidence do we have for herding behavior among some kinds of plant-eating dinosaurs? What defenses did these dinosaurs have against predators? Did any of them provide care for their young? See and touch real fossil bones, teeth, claws, and even an egg from a number of different plant-eating dinosaurs.

Examine dinosaur fossil replicas including duckbill skin, a Triceratops horn, and duckbill jaws. Bring your own questions to be answered about these many unique dinosaurs.

Saturday, April 12—Macbride Auditorium (2nd Floor)

The Fossil Guy: "Chewing up the Ice Age"

How do the teeth of the Ice Age mammoth and mastodon differ from one another? How does the skull of

the great sabertoothed
cat *Smilodon* compare
to that of the modern



lion? How were the shape and structure of their teeth specially adapted to their diets? Learn about these and other Ice Age mammals during this program.

A special focus will be placed on the recovery of Ice Age remains of giant ground sloths and mammoths by crews from the UI Museum of Natural History. See and touch mineralized bones of Ice Age creatures including horses, bison, deer, pole cats, cave bears and more!

View a replica skull of the famous Dire Wolf from the La Brea Tar Pits in California. Artifacts of Paleoindians will be used to help recreate the Ice Age world of North America. Are we able to answer the question "Why did many of the large Ice Age mammals go extinct?"

Saturday, April 26—Macbride Auditorium (2nd Floor)
The Fossil Guy: "Climate, Extinction, & The Fossil
Record"

What role did climate change have in some of the great extinction events in the fossil record? How might some groups of plants & animals have survived dramatic climate change while others went extinct? What other causes of extinction need to be considered?

See and touch many fossils of trilobites, blastoids, ammonites, Late Cretaceous dinosaurs, & Ice Age mammals as we examine three major extinction events: the Permian-Triassic (252 million years ago), the Cretaceous-Paleogene (66 million years ago), and the Late Pleistocene (ending 11,700 years ago). What lessons can be learned from past major extinction events that we can apply today?

SECRETARY'S MINUTES, MARCH 18, 2014

Hosts-Leonard and Connie Moellers

Science Center, 5824 Council Street N.E., Cedar Rapids, IA Call to order: 7:00 p.m. by Marv Houg, President.

<u>Introduction of new members or guests</u>- Dave Chase, Ray Anderson

Minutes None Available

Treasurer's report by Dale-Checking account balance \$8058.12. Final tally of show expenses not yet complete. Report filed.

Correspondence-Marv reported that he received many verbal responses to the quality and extent of the show. Thank you expressed to everyone who helped to make the show a resounding success.

Monthly Program: Ray Anderson, "Gold"

Door Prize Winner-Pappy

New Business

Motion made by Tom to have annual show in 2015 and second by Jeff Kahl. Discussion regarding the changing of date to March 28- 29 making it the last weekend in March 2015.

Motion approved.

Dave Chase volunteered to become our editor. Tom nominated Dave to be editor, second by Dale. Unanimous vote for.

Old business

Show report. Attendance 4963. Another record set. (Adults-3389, kids 1579)

Various comments and concerns were expressed. Question regarding "Dowsers" inclusion. More inexpensive things for kids to buy throughout the show, not just pebble pit. Perhaps some rearranging of things needed. More to be discussed at the board level.

Dell will order more t-shirts if enough people are interested. There are new members who may want shirts. Let Dell know.

Adjournment

Motion made by Jeff, second by A.J. Meeting adjourned 9:20 Respectfully submitted, Dell James, Sec.

BOARD MEETING MINUTES, APRIL 1, 2014

Present: Marv Houg, Dell James, Tom Whitlatch, Dale Stout, Sharon Sonnleitner, Bill Desmarais, Joy Cummings, Call to order: 7:30 p.m. by President Marv Houg' at his house

Show 2014 report

Total attendance 4963 with approximately (all the expenses not yet tallied) \$8,000.00.

Next year's show date has changed to last weekend of the month of March through no control of the clubs.

<u>Discussion</u> followed regarding the need to reconfigure the layout of the show for next year.

U of I kids did a great job of cleaning up. They were a great help this year.

Discussion regarding how we distribute the money.

Motion made my Bill, second by Tom to place for club approval the following scholarship awards:

U of I- \$3000.00 Cornell- \$1500.00 VAST- \$1000.00 Science Center \$1000.00

Motion approved.

There are still various vendors anxious to participate in the show. As of now, all previous vendors are returning.

Discussion regarding replacing the dowser exhibit with a walk-through fluorescent display. Sharon has a plan. Again, fossils are not the emphasis of our club so more lapidary gems, minerals etc. should be encouraged.

Show cases were discussed. Consensus reached that cases should have set up guidelines. The following general guidelines were agreed upon.

- 1. A business card only may be displayed in case.
- Flyers for the case or business can be made available at front desk and not distributed through cases.
- 3. No price tags allowed
- 4. Name tags denoting who designed the case.
- No advertisement of businesses other than a small business sized card.

Misc Business

Library - Joy and Sharon made some progress in collecting some of the existing library items. There are more items than originally thought. Some decisions need to be made as to disposition of articles. The previous librarian is anxious to have removed from house.

Auction

Sharon received request to sell some equipment maybe at the auction. Distance makes it prohibitive for us. Sharon will clarify.

Tom will call Tim about possibility of more to sell.

There are a plethora of Lapidary Journals older ones that need to be separated, etc. May be ok to place on auction? Or sell outright?

Field Trips

Marv has lined up field trip at Conklin Quarry for May 4.

Deb from river Products is asking for help with us for a special kid's trip into the quarry on August 8. Would appreciate help from any of us if interested.

Shows-

GSI trip-April 12.

April 26 -Waterloo and Davenport.

Watch Dale's email for more specifics.

Summer Picnics

June-Knollridge-Lapidary

July-Squaw Creek-Geode cracking

August-Morgan Creek Bingo

Dell reminded club that we have no snacks lined up for April or May. (Joy volunteered for May)/

Motion to adjourn by Dale, second by Bill.

Adjourned 9:45p.m.

Respectfully submitted, Dell James, Sec.

Officers, Directors, and Committee Chairs

364-2868
365-0612
365-7798
446-7591
360-9367
981-2482
396-4016
362-0684
455-2201
363-7842
377-3339
351-5559
455-2201
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.

Website: www.cedarvalleyrockclub.org

Club meetings are held the 3rd Tuesday of each month from September through November and from January through May at 7:00pm at the Science Center, 5824 Council Street NE, 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.



