

Cedar Valley Gems

Cedar Valley Rocks & Minerals Society
Cedar Rapids, Iowa

CEDAR VALLEY GEMS JUNE 2014 VOL. 40, ISSUE 6

SHOWS & CONVENTIONS

September 5-7 FAIRFIELD, IA. The Sac & Fox Lapidary Club's Gem Mineral & Fossil Show; Fairfax Arts & Convention Center, Main & Briggs Street, Fri. 6-9, Sat. 9-6, Sun. 10-5 Admission donation: Children under 5 free, 6-16 yrs \$1, Adults 17yrs. and up \$3. Contact: Betty Morris, 641.233.0366, elizabethmorris1974@outlook.com.

October 17-19 DES MOINES, IA. Midwest Federation (MWF) Convention. Paul Knapp Animal Learning Center, Iowa State Fairgrounds, 3000 East Grand Avenue, Des Moines, IA 50317

WEBSITE OF THE MONTH

Locating fossils in lowa is somewhat easy. But knowing where to go to look for certain kinds of fossils can be time consuming.

The following website offers a quick guide to fossil productive areas arranged by counties. Before venturing out for that one piece of Devonian horn coral that would complete your collection, check this site first.

www.fossilsites.com/STATES/IA.HTM

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.

Coral Reef Development 125,000 Years Ago in Curacao

At the May 20th CVRMS meeting the guest speaker was Cornell College geology Professor and Associate Dean of academic affairs, Ben Greenstein. Professor Greenstein spoke on the subject of coral reef development in an area of low hurricane frequency, Curacao. Exposures of 125,000-year-old fossil coral reefs have been lifted 10 meters above sea level by tectonic forces on the island of Curacao.

The resulting cliffs provide a natural laboratory in which Greenstein explored patterns of reef development (ecologic succession) in a region that experiences a very low frequency of hurricanes.



Ben Greenstein, geology Professor and Assistant Dean of Academic Affairs, Cornell College, Mount Vernon, Iowa

His talk presented the results of research conducted by Greenstein and geology students on the island of Curacao. Topics included patterns of reef succession, the mode in which the coral reefs accumulated over an approximate 12,000-year interval during Late Pleistocene time and an investigation into whether the Curacao Underwater Park has been effective at conserving modern coral reefs.

Professor Greenstein also answered club members' questions of reef accretion and astronomical influences on the reef site due to earth orbit wobble, obliquity and precession.



Cave Relief

Looking to beat the summer heat? Check out the soluble rocks at Horse Thief Cave at the Wapsipinicon State Park near Anamosa, Iowa. Legends says the cave was used as a camp by two horse thieves. Karst topography in the park suggest more caves abound in the area.

Cedar Valley Rock and Mineral Society Monthly Meeting — May 20, 2014

Location: Science Center

5824 Council Street N.E., Cedar Rapids, IA Call to order: 7:15 p.m. by Marv Houg, President.

Introduction of new members or guests: Mike and Colleen Ferrance (new members), Ben Greenstein (Guest Speaker)

Minutes: Motion to approve as written by Lara 2nd by Leonard. Approved.

Treasurer's report by Dale: Checking account balance \$2888.59. Report filed.

Correspondence: Condolences to the family and friends of Michael Sincak and Helen Sullivan. Thank You cards received from VAST and Science Center for the club's contributions.

Monthly Program: Professor Ben Greenstein from Cornell College gave us an exciting talk about coral fossils. See article.

Door Prize Winner: Tom Whitlatch

New Business:

- 1. Reminder about summer picnics fast approaching. Watch newsletter and Dale's emails. Feeding time at 6:30. Be generous with your potluck items. Bring your own drinks and table service.
- 2. Auction recap-About 1,100 items so far.
- 3. Show theme-still considering. Any ideas let Dale or Marv or Sharon know.
- 4. Suggested that the club conduct another vendor survey to

see how we can improve our service. When we know what out them will be, perhaps let the vendors know so they can stock their shelves appropriately. Perhaps the website can be utilized for this action.

- 5. Marv talked with Glenn about a geode trip if enough people interested. Marv is asking for help in finding locales. Keota possible?
- 6. Sadly, Bill Desmarais announced that he will be retiring from his post and the club will need a new vice president. He has been responsible for lining up club programs. Good luck to Bill and his wife Karen in their future adventures.
- 7. Dell is putting together a list for t-shirt orders. The logos will remain the same and hopefully the price. You can call her (319) 446-7591 or email cycladelics@msn.com and let her know your color and size. Same goes for nametags except you can call Dale about that.

Other business: Tom reminded everyone that the Midwest Federation show is in Des Moines on October 18th.

Anyone needing to sign on as guest to the Science Center Wi-Fi the password is **Science!** The exclamation point is part of the password not clever secretarial punctuation.

Adjournment: Motion made by A.J., second by Tom. Meeting adjourned 9:15 pm. Next meeting is picnic at Noelridge—lapidary.

Respectfully submitted,

Dell James, Secretary

Here and There with our Members and Friends

Our deepest sympathy to Barbara Sincak on the death of her husband, Michael, on April 10 from complications from surgery. Michael and Barbara have been members for since 2010 and so graciously brought the large fossil replica exhibits to our show since 2010. Michael was kind, generous, energetic and enthusiastic, with a real zest for life.

Our deepest sympathy to Gerry Sullivan on the sudden death of his wife, Helen, on May 15 while they were on a camping and collecting trip in New Mexico. Jerry & Helen have been members since 1994. Although they moved to Colorado, they come back to be dealers at our show. Helen was fun-loving and had a great sense of humor.

We wish a speedy recovery to Dean & Tish Young's son, Dustin, who was in a very serious car accident in March. Dean sent the following update: "Our family would like to thank all of the CVRMS members who prayed and thought of our son during his accident and healing process. He was in very bad shape when we arrived at the hospital in Wisconsin. They removed his spleen; he had 10 broken ribs, fractured hand, fractured pelvis, lacerated liver and bladder. One month later he is at home and healing a little more each day. He gets around with the help of a walker and a wheelchair if he needs to sit for any length of time – like church. He is expected to make a mostly-full recovery with time."

CVRM Board Meeting

Members Present: Marv Houg, , Dell James, Tom Whitlatch, Dale Stout, Bill Desmarais, Dave Roush

Call to order: June 3, 7:25 p.m. by Marv, President at Marv Houg's house

Show 2015 report - March 28-29. Dell will notify Rock and Gem Magazine for show ad plus any others that have show calendars. Discussion regarding the changing of the admission fees. Currently Adults \$2.00, Students \$1.00, kids below 12 free, Groups free with adult and people in uniform free. No changes anticipated however the rising costs of utilities etc. at Hawkeye Downs may determine the need for a raise in fees. Suggestion made to ask vendors what they would be more comfortable with: an increase in table fees or a raise in admission fees. Previous survey favored table increase. More to follow. Contract with Hawkeye Downs already signed.

Auction 2014 - September 20-21

Marv and Dale will be checking lots this week.

Marv will check with Sharon regarding the contracts. Need material list so flyers can be put together.

Food-Dell will do lunch on Friday. Will Sharon do the snack and Saturday dinner?

Dale will look for the Auction supplies. Trailer? Garage? Storage?

Field Trips

Marv and Glenn discussing setting up various field trips. Glen will check on Jessop? Maybe a geode trip somewhere? Marv will check on Crawfords, Keota, Moscow?

Summer Picnics (see details on this page)

Other Business

Dell is still taking orders for T-shirts. Will see if she can get by picnic?

Dale will check again on the nonprofit status of the club.

Tom discussed various activities from the Midwest Federation. A Youth Poster contest is in progress now. Still looking for a Rockhound of the Year. Midwest Federation show in Des Moines Oct. 18 -19.

Dell suggested that our club is not "user" friendly. New members and guests are not made to feel as welcome as they could be. One suggestion to help make people feel comfortable is that we all wear name tags. Dell will get temporary name tags and encourage people to wear their club name tags in addition to talking with the new people.

Motion to adjourn by Dave, second by Dale. Adjourned 9:05 p.m.

Respectfully submitted,

Dell James, Secretary

SUMMER PICNICS

Summer meetings are potlucks as noted below. We start eating at **6:30 pm sharp!** Bring a dish to share and your own drinks and tableware. Check the website for any last minute updates.

June 17th – Noelridge Park, Cedar Rapids — Lagoon Pavilion, Noelridge Park – on Council Street between 42nd & Collins Rd. Members will bring their lapidary equipment for people to try. Bring something to polish or use a sample supplied. Friends are welcome.

July 15th — Squaw Creek Park, Marion, IA — Meadowlark Shelter

Meadowlark is one of the bigger shelters in the park. From Cedar Rapids, take Hwy 100 (Marion By-pass) towards Hwy 13. It's the last right turn before Hwy 13 – Banner Drive. Once in the park, follow the signs. There will be several geode crackers at the picnic, so bring geodes for cracking. Extra geodes will be available, if you don't have any.

August 19th – Morgan Creek, Cedar Rapids, IA – Pavilion

Morgan Creek is located on the western edge of Cedar Rapids on Worcester Road.

From Hwy. 30 (from the west, south and east) - take the 80th Street Exit, north to 16th Ave., then east on 16th to Stoney Point Road; north on Stoney Point Road to Worcester Road; west on Worcester Road, the park is on your left. From north Cedar Rapids - take Hwy 94 to Stoney Point Road; south on Stoney Point Road to Worcester Road; right (west) on Worcester Road, the park is on your left.

The August picnic will be Bingo night for prizes. The club provides some nice rock prizes, so come and have a lot of fun playing bingo. This is one of the most fun events of all, so our new members are highly encouraged to attend.

Jumbled Basement Bedrock Makes Locating New Water Supply Difficult

Manson, lowa is having a big problem drilling a well, and the reason could date back millions of years.

Manson has failed three times to drill for a new steady water supply. The difficulty apparently is due to a meteor that struck an estimated 74 million years ago, creating what's known as the Manson impact crater. Geologists believe the meteor caused a catastrophic explosion that destroyed everything within 130 miles, although there is no surface evidence of the ancient impact.

Underground, however, remnants of the meteor remain, and they are causing headaches for drill engineers. To improve the chances of success in the city's fourth drilling attempt, the city hired a company that uses satellite imagery to locate aquifers and determine well sites.

"When the meteor hit, it blew out all the natural formations," said geologist Lanny Rosenquist. "It destroyed all the natural geology. Over in Fort Dodge you get certain layers; over here you don't hit those layers. Everything's mixed up."

Last year, a well was dug at the west end of town, beyond the Manson Mennonite Church. Drilling reached 1,600 feet without finding any water-bearing rock formation. The City Council voted to abandon the site in October.

Although the meteor created an inconvenience for the city of 1,700 people, it somehow improved the water's taste by removing minerals that make nearby well water harder.

"Manson has naturally soft water," said Mayor Dave George. "It's a little harder to get to, but it's worth it."

Edited article from the Des Moines Register and other sources.

Spotlight—A Green Glass Tektite Called Moldavite

Moldavite is a glassy material, usually olive green in color, that is thought to have formed during an asteroid impact about 15 million years ago in central Europe. The impacting body hit with a high enough velocity to melt and splatter the target rock across a strewn field that includes portions of what is now the Czech Republic, Austria and Germany.

Most of the splatter solidified in the air and fell to Earth in the Czech Republic. Today it is found in sediments of Middle to Upper Miocene age as droplet-shaped particles of green glassy material a few centimeters in diameter or smaller. Meteorite experts have named such materials "impactites."



Gem-quality Moldavite is often faceted or cut en cabochon and sold as a novelty gem. This faceted stone is about 13 millimeters x 11 millimeters in size and weights a little over 6 carats. Nice pieces of rough with an attractive shape and color are often wirewrapped or drilled and used as pendants or earrings. Many uncut specimens are purchased by meteorite and mineral collectors. Moldavite has to be used with care because it is about the same hardness as glass (5.5) and is brittle. It is best used in earrings and pendants. The largest market for gem and rough specimens of Moldavite is in alternative and complementary medicine. There is no scientific proof that these treatments are effective.

Edited from Geology.com.

Iowa's Sandy Connection to Hydraulic Fracking

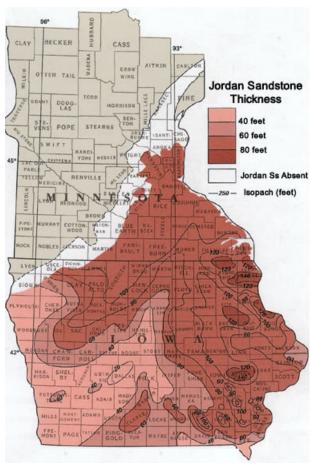
lowa's list of mineable materials is short compared to other mineral rich states. However one of hottest geological products in demand anywhere is abundant here in lowa - it is silica sand. lowa's ancient sand grains are prized for use in hydraulic fracturing (fracking) with the most desired type being the pure white quartz sand.

Industrial-sized mining of naturally occurring frac sand begun recently in northeast Iowa. Frac sand operations in Wisconsin and Minnesota have been going on for five or more years. Much of the desirable sand is associated with the Jordan sandstone formation.

During the oil and gas extraction from wells, frac sand is suspended in fluid, and then injected into wells under high pressure. This process opens and enlarges fractures, as well as to creates new ones. lowa's sands are hard enough to withstand intense pressure and are round enough to let oil and gas escape horizontal wells.

Most fracking operations occur in Arkansas, Texas, California, Colorado, New Mexico, Pennsylvania and within North Dakota's Bakken field. Fracking has become a profitable hydrocarbon extraction process and has created high demand for silica sand.

Mining premium sand throughout the Midwest is not without controversy. Earlier in 2014 supervisors in lowa's Allamakee and Winneshiek counties established moratoria on new frac sand mine operations in order to study the issue and decide on a set of ordinances to properly regulate these operations. The moratoria ends in September 2014.



The expansive Jordan sandstone formation covers much of the upper Midwest including Iowa. The sand is ideal for frac sand because it has a very uniform grain size, nicely rounded grain shapes and a uniform composition. It is also a very tough material that resists compressive forces of up to several tons per square inch. Graphic from Geology.com.

Article by David Chase, Editor

Thank You CVRMS for Generous Donations



Thank you so much for your generous donation of \$1000 to the Science Center, a 501(c) (3) non-profit corporation. This letter acknowledges that contribution and confirms that no goods or services were provided in return for your donation. Thanks again for your generosity toward the Science Center...

Sincerely,
Norah Hammond, Executive Director



On behalf of the students and teachers that will benefit from the generous donation the Cedar Valley Rock & Mineral Society made to the VAST Center, I want to thank you. The donation will help purchase materials for our earth science units that are used in classrooms across eastern lowa. We greatly appreciate your support and promotion of science.

Thank you! Kathy, Consultant

Power of Moving Water on Indian Creek

A year ago Indian Creek in Cedar Rapids, Iowa flooded... again. The city installed temporary structures called Tiger dams and pumps to contain the flow. Later this year Cedar Rapids will build earthen dikes along the creek near East Post Road to provide a more permanent flood prevention solution.

One of the overlooked benefits of a flood for rockhounds is the uncovering of sediment and newly exposed creek gravel. Each successive flood brings new opportunities to scour the ground looking for interesting collection candidates or to observe the power of water.

A certain bend in the creek does not exist during recent flooding; the creek merely widens and flows above it where the topography allows. This provides some interesting gravel deposits and removes grasses and weeds making the rock collecting easier for a time.

Once the flood water recede, I make my way to the creek bed to look for changes. Following the April 2013 flood the evidence clearly shows how water and rock interact:

- Widespread deposit of gravel size rocks is generally orientated in the path of the flow.
- The size and makeup of the gravel show material consis-



tency for this location.

- Mechanical weathering or erosion, in this case by water, affects rock types differentially by rock hardness.

The proposed flood protection levy will help contain future property damage in the neighborhood. It will also provide a channeling means for high water to run through the area. Following future water surges, the creek bed will remain a viable spot for rockhounds to collect freshly exposed gravel and whatever else comes downstream.

Article by David Chase, Editor

Field Trip-Geode Dig, Hamilton, Illinois

CVRMS will be going to the Gary Jacobs geode mine in Hamilton, Illinois. Gary has opened a new location near the old dig site. There is plenty of room and you can stay all day if you like. Keep in mind if it is raining hard we will not go.

When: Saturday June 28th, 2014

Time: 9:00 AM

Meet: Chaney Creek Boat Access, Hwy 96 North, Hamilton, IL Note: The BHGMS Club will meet the CVRMS Club between 6:50 and 7:00 a.m. for a short break at the south bound Rest Stop just south of Cedar Rapids on Interstate 380. Follow Hwy 218 into Keokuk, Iowa. Hwy 218 changes into Hwy 136 about 7 blocks before going across the Mississippi River into Hamilton, Illinois. Take Hwy 136 across the river. Once across take Hwy 96 North at the junction of Hwy 136 East and 96 North. Stay to your left as the road parallels the river. About 1/2 to 1 mile ahead on the left will be Chaney Creek Boat Access. Meet in the large parking lot, it is the same place that is used for Geode Fest.

What you will find: Geodes from golf ball size to softball size are typical and larger ones have been found.

Cost: \$20.00 per 5 gallon bucket

Tools: Picks, hoes, shovels, hammers & sledge hammer, chisels etc. Some ground will be loosened; it is dirt, clay and soft shale. There is a dig site each side of the creek; the old site is harder shale and limestone; the new site is soft clay, shale, and limestone easily dug with a pick, shovel and hoe. Safety equipment: highly recommended - safety glasses, gloves with grip, and common sense.

Bring food and plenty of drinking water. There are no restroom facilities so plan accordingly. The dig site is only 5 minutes away from parking so you can always head into town. This is a joint trip with several clubs working together. You will need to be current with your club dues/membership or you will not be allowed to go.

If you are going, please email or call me so I can plan accordingly – PLEASE RSVP. Make sure you include your cell and home phone numbers in your RSVP in case I need to make last minute calls or need to contact you while in transit.

Glen Rocca, Black Hawk Gem & Mineral Society 319-269-8168, glenr@forbin.net

2014 Auction Venue - Amana, Iowa

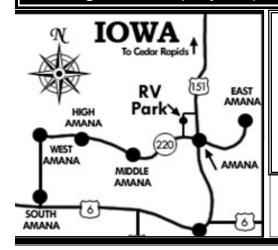
The CEDAR VALLEY ROCKS & MINERALS SOCIETY Presents

A TWO-DAY ROCK and MINERAL AUCTION

Amana RV Park and Event Center, 39 38th Ave, Amana, Iowa 52203

Saturday, September 20 – 9:00 a.m. - 7 p.m.? Sunday, September 21 – 10:00 a.m. – 4 p.m.?

Viewing Hours: Fri., Sept. 19, from 5:00 to 7:30 p.m.; Sat. at 7:30 a.m.; Sun at 8:30

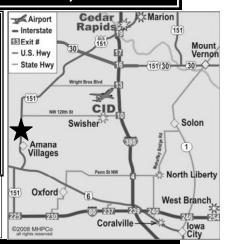


APPROXIMATELY 1,200 LOTS

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Many Excellent Specimens

HOT FOOD AVAILABLE CAMPING AVAILABLE (www.amanarvpark.com)



THE FOLLOWING IS A PRELIMINARY LIST OF ITEMS TO BE AUCTIONED EQUIPMENT WILL SELL AT 2:00 ON SATURDAY

ROCKS & MINERALS

Agate: Lake Superior, Mexican, Argentina, Zimbabwe, Australia, Brazil, Morocco, Fairburn

Amethyst

Dugway geodes

Jasper: Madagascar, Assorted

Petrified Wood: AZ, Sweet Home OR, Zimbabwe, Lousiana Palm, Hubbard Basin, Madgascar

Polished halves Polished slabs

Spectrolite

Tabasco geode halves

Thunder eggs: WI, MN, M, OR, Polish, German,

French

Tumbled stones

FOSSILS

Ammonite halves

Ammonites: Madagascar, Morocco

Fish: WY

Petrified wood pieces, root balls, and rounds -

various localities Stromatolite: Kona, WI,WY

ROUGH

Agate: Brazilian, Green Tree, Lake Superior,

Montana

Binghamite

Chalcedony

Coconut

Fire agate

Obsidian

Ocean jasper

Ocean wave

Viper jasper

EQUIPMENT (will sell at 2:00 on Saturday)

BOOKS

Lapidary Journal Sets

<u>MISC.</u>

Spheres: Agate, Jade, Petrified Wood, Spectrolite

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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.

CEDAR VALLEY ROCKS & MINERAL SOCIETY

CVRMS 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. Annual club dues can be sent to:

Dale Stout, 2237 Meadowbrook Dr. SE, Cedar Rapids, IA 52403.

CVRMS website: cedarvalleyrockclub.org



