



# Cedar Valley Gems

## Cedar Valley Rocks & Minerals Society

### Cedar Rapids, Iowa

CEDAR VALLEY GEMS

NOVEMBER 2014

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## President's Message

Well folks, it appears that winter is getting closer. As I write this we are forecast to get cold weather here in Iowa while parts of Minnesota and Wisconsin are forecast to get up to 12 to 18 maybe 20 inches of snow. Sure hope it stays up north. The bottom line is that we're probably done with field trips and other outside activities, unless we get a warm spell. While we never have as many field trips as we would like we did get is several collecting trips with fossils, minerals, and geodes the main focus. Our three picnics were a lot of fun especially with the weather cooperating.

With the holidays approaching I'm sure everyone will become busier with shopping, holiday parties, family gatherings probably centered around large meals, and of course the exchanging of presents. Our annual Christmas party will be December 16 at Guaranty Bank in Fairfax. I hope everyone can make it as this is a time for great fellowship and great food. Please keep in mind that we will take a free will offering for a couple local charities to purchase food for the needy. We have been doing some form of this for a long time and I'm always amazed at the generosity of our club members.

Once we are past the holidays we are only 3 months away from our next show. The dealer contracts have been sent out and Sharon has put the flyer for our 2015 show on our website. Please start sharing the flyer with family and friends to help get the word out about our show. Keep in mind that as the show approaches we will be asking for help.

With Thanksgiving only a few weeks away I hope everyone has a happy Thanksgiving and for those that are traveling have a safe trip.

*Marv Houg, CVR&MS President*

## Annual Meeting—Nov. 18

Cedar Valley Rocks & Minerals Society will meet November 18 at 7:00 p.m. for its Annual Meeting, which includes election of a 3-year Director, and a replacement for the Vice President. In addition to nominations being accepted from the floor, the following slate will be presented by the Nominating Committee of Dale Stout, Julie Whitlatch and Sharon Sonneleitner:

**Vice President**—open; **Director through 2016**—Jay Vavra.

Brent Studer, an astronomer from Kirkwood Community College, will present "A Year of Encounters with Small Worlds." Between November 2014 and July 2015, three space craft will rendezvous with three different small objects in our solar system. Rosetta and its lander will explore a comet, Dawn will investigate the dwarf planet Ceres in the asteroid belt, and New Horizons will finally reach Pluto. Tuesday's presentation will describe what we've learned so far and what we hope to learn about these little worlds and the formation of the solar system.

**The December Board meeting** will be held Tuesday, December 2, at 7:15 pm at the home of Marv and Sue Houg.

**Save Tuesday, December 16, for the Holiday Party.**

## Dues are Due in December

### 3D Printed Fossils & Rocks Could Transform Geology

Franek Hasiuk's Geological Fabrication Laboratory (or GeoFabLab), a narrow corner room in the basement of Iowa State's Science Hall specializes in 3D scanning and printing - as it says on the lab website, it's all about "making things geological!"

When he worked in industry, Hasiuk used 2D CT scans to study the pores within limestone reservoir rocks. It's a major industry challenge to understand fluid flow through the pore networks of rocks so oil can be extracted from the smallest pores.

In his own classes, Hasiuk has printed plastic fossils, crystals, and dinosaur bones. "These sort of things get people engaged," said Hasiuk, pointing to a T. rex skull with a moving jawbone that he printed. "These are chomp-able, flexible fossils. Using this technology, the GeoFabLab can bring dead things to life."

*Edited from ISU sources.*

# CVRMS October Meeting Minutes

**Meeting:** President Marv Houg called the meeting to order at 7:07 p.m., October 21 at the Rockwell Collins 34th Street location, with 17 members and 1 guest, Larry Kennedy, present.

The Secretary's report was approved. Treasurer Dale Stout reported \$4,476.50 in checking. Sales from the auction totaled \$26,744, yielding a profit of \$4,655.51. The treasurer's report was filed. Juhls and several others have committed to the 2015 auction.

**Program:** We then broke for a program by Eric Fritch on Australian Minerals. His presentation not only showed the beautiful minerals of the country, but also the locations and some beautiful scenery. The program was followed by refreshments.

On the return from break, Tom Whitlatch presented a certificate recognizing the club for cumulative donations of \$1,000 for the MWF scholarship fund.

**Show:** The membership approved the 2015 theme of Treasures Beneath our Feet. Ray Garton will be a new dealer. It was noted the Board raised the donation for adults to \$3.

**Holiday Party:** The Holiday Party is set for December 16 at Guaranty Bank in Fairfax, Iowa – gather at 6:00 p.m.; eat at 6:30 p.m. The club will provide drink and a turkey, which Dell James will prepare. Dinner will be potluck, in addition to the turkey.

Julie Whitlatch will prepare games. Dell will have door

prizes for all. A collection will be taken up for HACAP and the Linn Community Food Bank.

**Election:** The November meeting is the annual meeting, at which an election will be held for 1<sup>st</sup> Vice President and Director to 2017. Marv appointed Dale, Julie and Sharon as the Nominating Committee.

**Field Trips:** 58 attended the Klein Quarry field trip. It was not a prolific as on the previous entry, but some nice things were found.

**Orders:** Please let Dale know by the November meeting if you want to order an agate calendar. Dale can also order *Rock & Gem* at a special rate. Also, if you want to order a name tag, let Dale know.

**Miscellaneous:** Julie would like us to consider hosting the 2019 joint MWF and AFMS show. Tom announced all club events, including field trips, need an insurance certificate.

He also noted the MWF is looking for photos from past MWF conventions for its 75<sup>th</sup> anniversary next year. He also requested that the club's newsletter and website be entered in the MWF competition next year.

Julie made the motion to adjourn the meeting. Tom seconded. Adjourned at 9:33 p.m.

Respectfully submitted,  
Sharon Sonnleitner, Acting Secretary

## WEBSITES OF THE MONTH

You just found that perfect mineral or rock for your collection but want to do more with it than filing it in a box under the bed.

Check out Inland Lapidary's equipment, diamond tools, and lapidary supplies. The company's equipment includes diamond band saws and trim saws, plus diamond grinders and flat lap machines, - all designed specifically for use on rocks and minerals.

More information can be found at this website: [www.inlandlapidary.com/](http://www.inlandlapidary.com/) including reference material and how-to articles.



The Bedrock Geologic Map of Iowa portrays the current interpretation of the distribution of various bedrock stratigraphic units present at the bedrock surface. See the Iowa DNR website for more information: [www.iowadnr.gov/Environment/GeologyMapping.aspx](http://www.iowadnr.gov/Environment/GeologyMapping.aspx)

# CVRMS November Board Minutes

Board Minutes – November 7, 2014

Present: Marv Houg, Dale Stout, Bill Desmarais, Tom Whitlatch, Joy Cummings, Sharon Sonnleitner

President Marv Houg called the meeting at 7:23 p.m.

**Auction:** Added to requests for the 2015 auction: Joy – a saw; Bob Roper – 25 lots; Darren Cruse – reduced lots to 0-50.

**Show:** Treasures Beneath our Feet. Marv passed out a list possible displays based on discussion at the October Board meeting. Bill will contact Sherm Lundy and Marv will talk with Brian Gossman, the State DOT geologist, about possible displays and ideas. Marv will contact Ray Garton to see how many tables he needs. Tom will contact Al and Tammy regarding a rock-painting booth to see how many tables they would need. When that information is known, the floor plan can be updated. Table rates will stay at \$8 per foot +\$20 Electricity for regular dealers and \$7 per foot for front tables +\$20 Electricity for demonstrating dealers. Darren Cruse will send out contracts shortly. Sharon will prepare the Flyer.

**Field Trips:** Possible indoor field trips were noted: Porter House in Decorah (only open May-Dec); Phil Burgess in Prairie du Chien, Wisconsin.

**Miscellaneous:** Dale will call about insurance certificates. Tom noted that we should enter the website and newsletter in the MWF competition next year. There was a short discussion of the 2019 joint MWF and AFMS show. It was noted we hosted show in 1978 and 2004. Joy made a motion to adjourn. Adjourned 9:10 p.m.

Respectfully submitted,  
Sharon Sonnleitner, Acting Secretary

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## EPA Seeks Authority Over All U.S. Waters

*Note: The EPA's authority over "waters of the United States" was legislatively defined as applying only to "navigable" waters. Recently the EPA proposed new rules which omit the word "navigable," thus placing under its authority ALL waters and waterways, even temporary waterways such as drainage ditches.*

*From the Congressional Record: June 25, 2014:*  
Today, U.S. Senator John Barrasso (R-WY) called on the Senate to support his legislation to prevent the Environmental Protection Agency and the Army Corps of Engineers from finalizing their March, 2014, proposed rule which would significantly expand federal authority under the Clean Water Act (CWA).

*Excerpted from Sen. Barrasso's remarks:* I have very serious concerns about the EPA's proposed Clean Water Act jurisdictional rule. . . . Through this recently proposed rule, federal agencies are attempting to

expand the definition of "waters of the United States." They want to include ditches and other dry areas where water flows only for a short duration after a rainfall. The government wants to control even that.

Federal regulations have never defined ditches and other upland drainage features as "Waters of the US." But this proposed rule does, and it will have a huge impact on farmers, on ranchers, on small businesses that need to put a shovel in the ground to make a living. . . . Congress never intended the Clean Water Act to be used this way."

*—From the ALAA Newsletter (July-Sept, 2014).*  
ALAA is the lobbying arm of the American Federation, working on behalf of rockhounds to keep public lands open and accessible to all, including the elderly and handicapped.

## 2014 Geode Fest Recap from Hamilton



The 2014 Geode Fest which is held every year at Hamilton, Illinois was another successful event for the organizers of this annual festivity which focuses on the collecting, breaking, showing, trading, buying, and selling of the world renowned "Keokuk Geode".



While the geodes are found in a much larger area than just Keokuk, it has been widely known that Keokuk is approximately the center of about a 100 mile diameter circle of what are considered by many to be the most unique geodes in the world.

Almost 20 different minerals have been found in these geodes and they can come in sizes ranging from the size of a pea to 300 to 400 pound geodes. The Geode Fest provides for a chance to interact with other collectors with the same passion for that round rock that contains the hidden treasures.

While I don't know the final number of collectors who participated it seemed like in the hundreds as there were many field trips on each of the days to different locations to find those prized trophies.

For those that are still interested in securing some geodes but didn't want to go through the work needed

to get them, there were many vendors on site that had geodes and other items for sale.

The time that people were out digging for geodes also provided an opportunity for the many vendors and shoppers to interact with each other. The weather cooperated, although it was slightly warmer than normal but it didn't rain, so everyone was happy. I would like to add that several of Cedar Valley Rock and Mineral Society members were vendors at Geode Fest.

This is a great family event and I would encourage anyone interested in geodes to consider this for a field trip. Dates for next year's Geode Fest are September 25 -27, 2015 which is one week after our annual Auction held at the Amana RV Park. Mark your calendar now.

*By Marv Houg.*

## Hawkeye State Paleontology

Iowa's distant past can be understood like so many layers of cake—sort of. Here's how paleoportal sorts Iowa throughout geologic time:

**The Precambrian:** A small amount of Precambrian rock is exposed in the northwest corner of Iowa. This rock is metamorphic and no fossils are known from it.

**The Paleozoic:** Warm, shallow seas covered much of what is now Iowa during most of the Paleozoic. These waters were home to a myriad of marine organisms, and their fossils can be found in the rocks formed from sediments deposited on the ancient sea floor. Particularly abundant are brachiopods, trilobites, cephalopods, corals, mollusks, and bryozoans. Later in the Paleozoic, great coal swamps covered much of the state. The seas returned periodically, flooding the swampy coast. Fossils of lobe-finned fish, amphibians, and plants have been recovered from the rocks formed from these sediments. The seas withdrew from the state by the end of the Paleozoic.

**The Mesozoic:** The state remained above sea level for the early part of the Mesozoic before another shallow sea returned to flood the landscape. The shoreline of this shallow sea eventually retreated to the west, leaving behind isolated areas of evaporating seawater. When the brines in these areas became sufficiently concentrated, gypsum crystals formed and built up on the sea floor. River systems developed on the newly exposed land surface, and the floodplains and coastal lowlands became covered with lush subtropical vegetation. The sea returned late in the Mesozoic and flooded the area. Plesiosaurs swam in these waters, and their fossils have been recovered in the western part of the state.

**The Cenozoic:** There are no known rocks or fossils from the early part of the Cenozoic in Iowa. The state lay above sea level, and this was a time of erosion. In the late Cenozoic, great continental glaciers flowed from the north. The sediments left by the melting ice were deposited across the state. Among the most famous are vast deposits of wind-blown silt (loess) in western Iowa, called the Loess Hills. Fossils of mastodons, mammoths and sloths have been found throughout Iowa.

*Edited from: [www.paleoportal.org/](http://www.paleoportal.org/)*

## Iowa's Semi-Precious Gems

Yes, Iowa does have a few semi-precious gems and minerals that can be found. These reside mostly in and around the state's rivers and river basins. Here is a brief list of what is available if you know where to look:

### Chalcedony

Chalcedony is a type of quartz that is likely the most identifiable of the semi-precious gemstones found in the state. While not scientifically distinguished from quartz, it's widely considered by gem collectors and experts as a different item. Chalcedony typically comes in white or blue.

### False Coral

Found in Iowa's rivers is a gem known as false coral. In the water, it's similar in appearance and shape to red coral, but the living organism loses its color once removed from the water. Like coral, the remains of the organism form a hard, porous material that can be used for jewelry.

### Moss Agate

Although not typical in Iowa, the presence of natural chalcedony creates a possibility of this particular quartz pseudomorph. Impurities within the chalcedony may occasionally cause a moss-like substance to grow within the stone. Moss agate isn't considered a true agate since it lacks the multicolored banding typically found in the stone, but the change in chemical composition allowing the internal substance to grow is great enough to warrant a separate classification from chalcedony and agate.

### Pearls

Typical to most bodies of water, both salt and fresh, pearls can be found in some of the shelled mollusks living in Iowa's rivers. Also common to most bodies of water, the chances of locating a pearl within a mollusk is fairly rare, which is what makes it valuable. Pearls are identifiable as smooth, round stones with an iridescent white, silver or pinkish appearance.

Have you collected any of these semi-precious gems from Iowa sources? If so, bring them in to a club meeting and tell your story.

*Edited from: [www.ehow.com/info\\_8420760\\_gems-found-iowa.html](http://www.ehow.com/info_8420760_gems-found-iowa.html).*

## EVENTS

**November 15: Iowa City, IA** - The Fossil Guy: "Become a Pleistocene Private Eye. Learn how to be a "Pleistocene private eye"! 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 mammoths, mastodons, cave bears, horses, bison, and deer. View replica skulls of the saber-tooth cat *Smilodon* and the dire wolf from the La Brea Tar Pits in California. Artifacts of Paleo-Indians will be used to help recreate the Ice Age world of North America.

**Nov. 18: Cedar Rapids, IA** - November CVRMS meeting - Rockwell Collins 35th St Cafeteria. Go to the CVRMS website for more details: [www.cedarvalleyrockclub.org](http://www.cedarvalleyrockclub.org)

**Nov. 20: Iowa City, IA** - U of I Explorers Seminar - GIS Day. The University of Iowa Museum of Natural History sponsors the monthly Explorers Seminar Series, with interdisciplinary public lectures featuring researchers who explore culture and the environment in a variety of ways and locations. A cross-section of departments are represented in the series, including Anthropology, Geoscience, Environmental Science, Geography, Biological Sciences, and Engineering. The seminars take place monthly on Thursday evenings at 7:00pm in the Museum's Biosphere Discovery Hub. Programs involve a 30-45 minute lecture, followed by interactions with the speaker and refreshments.

**NOV 21-23: AFFTON, MO.** St. Louis Mineral and Gem Society's Annual Show; White Rodgers Affton Community Center, 9801 Mackenzie Rd.; Fri. 4-8, Sat. 10-7, Sun. 10-5; Contact: Melissa Perucca, [meliss5301@aol.com](mailto:meliss5301@aol.com), [strockclub.com](http://strockclub.com).

**NOV 22-23: MADISON, WI** Madison Gem & Mineral Club Annual Show Sat 9:30-5, Sun 10-5. Exhibition Hall at Alliant Energy Center, 1919 Alliant Energy Center Hwy, Madison. Contact Nevin Franke, (608) 251-2601, [burniesrockshop@gmail.com](mailto:burniesrockshop@gmail.com), [www.madisonrockclub.org](http://www.madisonrockclub.org)

**Dec. 16: Fairfax, IA** - December CVRMS Christmas program - Guaranty Bank. Visit the CVRMS website for more details: [www.cedarvalleyrockclub.org/](http://www.cedarvalleyrockclub.org/)

## Future President from Iowa Trained as Geologist



Herbert Hoover was one of the very first students at Leland Stanford, Jr. University, graduating as a member of the "Pioneer" class of 1895 with a bachelor's degree in geology. While in college he met and married another geology major, Lou Henry.

In Australia in 1897 Hoover worked as geologist and mining engineer. The company was exploring gold mining prospects and later appointed Hoover as mine manager.

In the fall of 1896 Louis Janin recommended Hoover for a position with the British mining firm of Bewick, Moreing and Company. They were looking for Americans skilled in gold-mining practices to work in western Australia.

By May of 1897 he arrived in western Australia. From there, a railroad journey took him inland to Coolgardie, described by Hoover as a place which suffered from "red dust, black flies, and white heat." Later the mining headquarters were moved about 20 miles to Kalgoorlie which Hoover found no better. His duties included sampling, surveying, and evaluating mines that were offered to his firm for purchase. Hoover traveled sometimes by camel which he said was "an even less successful creation than a horse" to mines with names like IOU, Siberia, and Never Never. Hoover's big mine find was the wealthy Sons of Gwalia Mine.

*Edited from Herbert Hoover archive material.*

## Spotlight Gemstone: All About Agates

Agate is a banded form of finely-grained, microcrystalline Quartz. The lovely color patterns and banding make this translucent gemstone very unique. Agates can have many distinctive styles and patterns, but each Agate is unique in its own habit, with no two Agates being the same.



A generally accepted requirement in the definition of Agate is that it has to be banded. This qualification distinguishes it from other forms of Chalcedony which are not banded. Exceptions include Dendritic Agate and Moss Agate, which are not true Agates since they lack the banding patterns, but they are still traditionally called Agates since they have more than one color.

Onyx, when banded white and black, is technically a form of Agate, and Sardonyx, which is a banded reddish and white Chalcedony, is also technically a type of Agate.

Some forms of Carnelian may also exhibit banding and can therefore be classified as both Carnelian and Agate. Deposits where Agates are commercially mined are usually very extensive, thereby enabling this gemstone to be affordable and

inexpensive. However, a fine and sharp banded pattern, combined with natural strong coloring, will quickly increase the cost and value of and Agate.

Specific Agate localities will provide similarities in banding style and color, thereby lending many Agates a geographic prefix. Other variety names used will connote specific colors or patterns, such as Fire Agate or Eye Agate.

The history of Agate production is closely tied to German town of Idar-Oberstein, which has evolved as an important gemstone center. Agates and Jasper were historically found in the Idar-Oberstein region, and cut and polished by local craftsman. With the discovery of the enormous Agate deposits in Rio Grande do Sul, Brazil in the 1800's, the new material was shipped to Idar-

Oberstein for cutting and polishing.

The local Agate cutters of Idar-Oberstein were well-suited for this job, having been historically trained in this profession. Idar-Oberstein remains today as an important cutting and polishing center.

Agate is generally an inexpensive gemstone when used in jewelry. It is cut and polished into cabochons, and used as beads for necklaces and bracelets. It is also carved into cameos which can be worn as pendants.

Agate makes an exquisite ornamental stone, and is cut into slabs, animal carvings, ornate book ends, and small statues and figures. Ornaments such as knife handles, pins, snuff boxes and the like are also cut from Agate.

Agates used as gemstones may be naturally colored, but they are often dyed. This is especially true of the Agates from Brazil that have more intense colors. Hot pink, blue, or green colors in Agate are always dyed.

*Edited from: [www.minerals.net](http://www.minerals.net)*

## Collecting At Fossil & Prairie Park Preserve

During the Devonian Period, 365 million years ago, Iowa was an ocean. Most of the fossils currently found at the Fossil & Prairie Park Preserve are from the shallow sea environment and are marine invertebrates. The most common fossils found at the preserve are brachiopods, gastropods, horn corals, colony corals, crinoids, bryozoans, and cephalopods. The Park is open from Sunrise to Sunset. The Center is open weekends in May, September & October from 1-4 p.m. and Memorial Day thru Labor Day from 1-4 p.m. Daily. Although collecting is allowed, we ask that you take only for a personal collection. Reselling is prohibited. Plan your trip to Rockford, located just southeast of Mason City by visiting their website

fpcenter@myomnitel.com  
www.fossilcenter.com

## Officers, Directors, and Committee Chairs

President.....	Marv Houg (m_houg@yahoo.com).....	364-2868
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Hospitality .....	Jeff Kahl.....	455-2201
Webmaster .....	Sharon Sonnleitner (sonnb@aol.com) .....	396-4016

Club meetings are held the 3rd Tuesday of each month from September through November and from January through May at 7:00 p.m. at the Rockwell Collins 35th Street Plant Cafeteria, 855 35th St NE, Cedar Rapids, Iowa. The December meeting is a Christmas dinner held on the usual meeting night. June, July, and August meetings are potlucks held at 6:30 p.m. 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.

**Annual dues are \$15.00 per family per calendar year. Dues can be sent to:**

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

CVRMS website:  
[cedarvalleyrockclub.org](http://cedarvalleyrockclub.org)

**Meeting Place:  
ROCKWELL COLLINS 35TH ST  
PLANT CAFETERIA  
NOV. 18 @ 7 P.M.**



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