

The Agate Explorer

December 2019

le los le los le los les Potluck Christmas Party

Saturday, December 14

Meal at noon.

We Heave Mesh sh Followed by white elephant gift exchange. If you would like to participate in the exchange, bring one or more gift (gag or not, rock related or not). From 9-11 that morning we will be finishing preparing boxes for the auction.



Don't forget! Your dues are due.

\$20 per household per year, January-December. Checks made payable to: Cuyuna Rock, Gem, and Mineral Society. You may pay them at the Clubhouse, or mail to: Cuyuna Rock, Gem, and Mineral Society, 1001 Kingwood St., Ste. B-40 Brainerd, MN 56401

Club Calendar

December 14 - Christmas Potluck Party; 9-11, auction preparation meal at noon, festivities to follow.

January 4, 2020—live auction of the Club members' Moe and Wagoner collections at the Sample show in Brainerd, 10:30 a.m.

January 11 —Meeting

February 8—Meeting

March 14—meeting

April -Meeting date subject to change. Regularly scheduled date is the day before Easter.

May 9-10 -Annual Rock Show

Information subject to change.



Franklin Art Center

Club Information

Website-www.cuyunarockclub.org Email-cuyunarockgemclub@gmail.com

Meeting Place

Lower level Franklin Arts Center 1001 Kingwood St, Brainerd, MN 56401

Directions

.4 mile east of Business Hwy. 371 & Hwy. 210 intersection. (Castle turret water tower.)

Date/Time

the 2nd Saturday of each month at 2 p.m. unless otherwise noted.

Club Dues

\$20/ family Free /unaccompanied juniors Membership runs from Jan. 1-Dec. 31st.

Club Purpose:

To foster an interest (& encourage young & old) to study earth science, enjoy the art of lapidary, hunting for rocks, and semiprecious stones. We also strive to use what we know and acquire to *further educate everyone who has* an interest in our hobby.

> We are a not-for-profit organization.

Rock and Mineral Auction

SPONSORED BY THE CUYUNA ROCK, GEM, AND MINERAL SOCIETY



IN CONJUNCTION WITH SAMPLE'S AGATE, GEM, & MINERAL SHOW
A PORTION OF THE PROCEEDS DONATED TO SMILES FOR JAKE.

SATURDAY, JANUARY 4TH

THE BRAINERD EXCHANGE (THE RAILROAD SHOPS)
210 BLACK SMITH CIR., BRAINERD MN 56401

TIME: 10:30 A.M.
VIEWING BEGINS AT 9:00 A.M.

INCLUDES COLLECTIONS OF LARGE MINERAL SPECIMENS, MICRO MINERALS, SOUTHWESTERN U.S. AGATES, JASPERS, & GEODES. INDIVIDUAL SPECIMENS & 50 PAILS OF MATERIAL. MORE TO BE ADDED.

FOR MORE INFORMATION CHECK OUT THE WEBSITE: WWW.CUYUNAROCKCLUB.ORG. PRESIDENT ED OPATZ, 320-250-1363.

December Rock Shows

6-8—COSTA MESA, CA: Gem Faire Inc.; OC Fair & Event Center; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7, under 12 free; Website: http://www.gemfaire.com 6-8—HUDSON, FL: Withlacoochee Rock-

hounds; Veterans Memorial Park; Daily 9-5; 13-15—SANTA BARBARA, CA: Gem \$3, teens \$1, under 13 fee; Website: www.withlacoccheerock hounds.com 7-8—EDMONDS, WA: Maplewood Rock & Gem Club; Maplewood Rock & Gem Clubhouse; Sat. 9-5, Sun. 10-5; free; contact Mary Ann Collins, (206) 714-3922; Email: collma1@comcast.net

7-8—PATCHOGUE, NY: Suffolk Gem & Mineral Club; Our Lady of Mt. Carmel Auditorium; Daily 10-5; \$6, under 12 free; Website: suffolkgem.com

13-15—LAWRENCEVILLE, GA: Bellpoint Gem Show; Gwinnett County Fairgrounds; Fri. & Sat. 10-6, Sun. 10-5; \$5, under 15 free; Website: www.bellpoint promotions.com

Faire Inc.; Earl Warren Showgrounds; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7, under 12 free; Website: http://www.gemfaire.com 13-15—FLETCHER, NC: Mountain Area Gem & Mineral Association; WNC Agriculture Center; Fri. & Sat. 10-6, Sun. 10-4; free admission; Website: www.americanrock hound.com

14-15—FRANKLIN, TN: Mid-Tennessee

Gem & Mineral Society; Williamson County Ag Expo Park; Sat. 9-6, Sun. 10-5; Adults \$5, under 13 free; Website: http:// www.MTGMS.org/show.htm 14-15—PINECREST, FL: Miami Mineralogical & Lapidary Guild; Evelyn Greer Park; Daily 10-5; \$6, under 12 free; Website: www.miamigemandmineral.com 14-15—SAN ANTONIO, TX: Peppers Gems; San Antonio Garden Center; Sat. 9-6, Sun. 9-4; free; Website: www.peppersgems.com

20-22—SAN DIEGO, CA: Gem Faire Inc.; Scottish Rite Center; Fri. 12-6, Sat. 10-6, Sun. 10-5; \$7, under 12 free; Website: http://www.gemfaire.com

Rox Box

A place to advertise rock items to sell and to inquire about items to purchase.



The Cuyuna Rock, Gem & Society accepts no responsibility for any dissatisfaction that may occur by either party, seller or buyer. The Society does not profit in any way by sales transactions.

For Sale: Rock **Drilling System** Like new condition. Includes 3 speed drill press, coolant delivery system, 3 spare nozzles, maple drilling block, 8



oz. bottle diamond lube, stainless steel magnetic base coolant recovery/splash tray, adjustable mini-vise, 6 piece diamond drill bit assortment. \$150 or best offer. Call Bey Williams at 218-821-5684.

For Sale: A variety of lapidary equipment, including tumblers, flat laps, rock saws (10-20' blades), automatic cabbing machine, 4 wheel cabbing machine, saw blades. Call Ed Opatz at 320-250-1363.



Six Most Expensive Fancy **Colored Diamonds**



The Pink Star, previously known as the Steinmetz Pink, is the largest diamond to have been graded a Fancy Vivid Pink. Its color and size rank it among the top three in its pink diamond class.

After five minutes of bidding at a 2017 Sotheby's auction in Hong Kong, the ovalshaped 59.6-carat pink diamond broke the record for the highest price ever paid for a jewel: a whopping \$71 million USD.

https://www.truefacet.com/guide/6expensive-fancy-colored-diamonds/

Cuyuna Rock, Gem & Mineral Society **Board Meeting Minutes** Saturday October 12, 2019

Meeting called to order by President Ed Opatz at 12:10 pm.

Present were Treasurer Kevin Martini, Secretary Joanie Hanson and Board Members at Large- Vern Iverson, Lilly Peterson and Lori DuBois.

Motion to approve August minutes was passed.

Ed obtained permission for cafeteria usage for November 2, 9, Dec 14.

Treasurer's Report- will be posted at Rock

Club, Board passed motion to approve paying bills for the month.

Shop- motion to make necessary improvements to shop equipment approved.

Met with Auctioneer for January showlooking for boxes to put rocks in for auction.

No buyer's premium and no online auction - motion approved.

Board approved scholarship for Matt Metzler.

Respectfully submitted, Joanie Hanson, Secretary

The date of the Christmas party, December 14, will be your last chance to purchase anything outright that is going to the auction. Most of the material is from the collections of Dave and JoAnn Moe and Harry and Phyllis Wagoner.

Birds are ancient creatures. Every hawk, sparrow, pigeon and penguin alive today has ancestral roots dating back to the Jurassic, when the first birds were just another form of raptor-like dinosaur. Dozens of fossils uncovered and described during the last three decades have illuminated much of this deep history, but the rock record can still yield surprises. A fossil recently found in Japan is one such unexpected avian that raises questions about what else may await discovery.

The skeleton, named Fukuipteryx prima, was described by Fukui Prefectural University paleontologist Takuya Imai and colleagues today in Communications Biology. And while numerous birds of similar geologic age have been named in the past few decades, the details of these bones and where they were found have experts a-flutter.

The 120 million-year-old fossil was discovered in the summer of 2013 while searching for fossils at Japan's Kitadani Dinosaur Quarry. "One of my colleagues at Fukui Prefectural Dinosaur Museum spotted tiny bones in a block of siltstone," Imai says. At the time, it wasn't clear what creature the bones belonged to, but once the encasing rock was chipped away, the structure of the fossil became clear. The skeleton was an early bird, and an unusual one at that.

Small bodies and hollow bones have made birds relatively rare finds in the fossil record. Only a few unique fossil deposits, like China's 125 million-year-old Jehol Biota or the United States' 50 million-year-old Green River Formation, allow paleontologists to get a good look at ancient avians. To find a well-preserved fossil bird outside such places of exceptional preservation represents a noteworthy paleontological discovery, and Fukuipteryx in Japan adds

Newly Discovered Fossil Bird another significant spot on the map for fossil birds

> More than that, the skeleton of Fukuiptervx is preserved in three dimensions, meaning the bird's bones are close to their shape in life and have not been compressed over the course of time. "To be honest, we were not expecting to find such good material from a fossil bird at our site," Imai says. The pale-



ontologists had hoped for fragments and got most of a well-preserved skeleton. The fossil differs from those found in China's Jehol Biota, which are smooshed and look like bony pancakes. Given that Fukuiptervx is roughly the same age as those flattened fliers, the skeleton offers experts a clear look at avian skeletal anatomy during the Early Cretaceous.

In overall form, Imai and coauthors write, Fukuipteryx looks very similar to some of the earliest birds that evolved about 30 million years earlier during the Jurassic. Fingers ending in claws, for example, is a trait Fukuiptervx shares with one of the earliest known birds, Archaeopteryx. But the tail of Fukuipteryx is short and ends in a skeletal structure called a pygostyle. The bony structure is an anchor point for muscle and tail feathers, seen in modern birds and considered an important trait that birds evolved along their transition from raptorlike dinosaurs to the fliers we know today.

The combination of characteristics put Fukuipteryx in an unexpected place among early birds. "Our analysis revealed it is the most primitive among the Early Cretaceous birds," Imai says. Fukuipteryx shared a great deal in common with the earliest birds while having the flashy tail associated with more modern species.

Rather than being a strange case, Fukuipteryx underscores a common theme in evolution. "As early parts of evolutionary [diversification] become better sampled, it doesn't surprise me when we see unexpected combinations of characteristics," says Stony Brook University paleontologist Alan Turner. "Evolution rarely proceeds in a linear manner," Turner adds, with features—like a pygostyle—sometimes showing up in combinations not seen before.

Future discoveries will test the idea, but this one bird may indicate that the early proliferation of birds through the late part of the Jurassic and early part of the Cretaceous took on more varied forms than experts now recognize. "I think as new localities are found with previously unsampled birds, we should expect surprises," Turner says, adding that experts have only just scratched the surface of ancient bird diversity.

Fukuipteryx won't be the last fossil flapper to surprise scientists. "I feel it is merely one of many currently unknown birds awaiting to be discovered in the future outside of China," Imai says. There is an entire world of early birds waiting in the wings.

https://www.smithsonianmag.com/sciencenature/newly-discovered-fossil-bird-fillsgap-between-dinosaurs-and-modern-fliers-180973551/

Jewelry Making Tip By Brad Smith www.BradSmithJewelry.com

Quick Close Ups

Often when trying to get a close-up photo with your iPhone or Android, you end up with a fuzzy, out-of-focus image. Next time try using your loupe over the camera lens. It works quickly and easily.





Mineral Encyclopedia



Molybdenite is a rare mineral composed of molybdenum and sulfur, with a chemical composition of MoS₂. It occurs in igneous and metamorphic rocks as gray hexagonal crystals and foliated masses with a metallic luster. Molybdenite is the most important ore of molybdenum and often contains minor amounts of rhenium which are often produced as a byproduct.

Physical Properties of Molybdenite

Molybdenite has physical properties that often cause it to be confused with graphite. Both of these minerals are gray to silver in color, have a very low hardness, and occur in hexagonal crystals or foliated masses. Both minerals have a layered atomic structure with planes of extreme weakness. This gives them a slippery feel and makes them valuable as a solid lubricant.

Molybdenite has a higher specific gravity than graphite (molybdenite=4.7, graphite=2.23). Molybdenite usually has a slightly bluish-gray color and a slightly bluish-gray streak, while graphite's color and streak are gray to black. Molybdenite usually has a higher luster than graphite. Experienced observers can often use these subtle differences in color, streak and luster to separate graphite from molybdenite. A variety of laboratory methods can also be used to identify molybdenite.

Geologic Occurrence of Molybdenite
Molybdenite occurs as isolated crystals, and
foliated masses in granite, rhyolite, or
pegmatite. Molybdenite is also found
in rocks that have been altered by contact

and hydrothermal metamorphism. Much of the commercially produced molybdenite occurs as disseminated crystals in porphyry copper deposits where it is produced as a byproduct mineral. Lesser amounts are produced at mines where molybdenite is the primary product. Minerals that are often found with molybdenite include quartz, pyrite, chalcopyrite, fluorite, cassiterite, scheelite, and wolframite.

Countries with significant molybdenite production include: Armenia, Canada, Chile, China, Iran, Mexico, Mongolia, Peru, Russia, and the United States. The United States is a net exporter of molybdenum.

Molybdenite as an Ore of Rhenium

With an average crustal abundance of less than one part per billion, rhenium is one of the rarest elements in Earth's crust. Most of the world's known rhenium resource exists within the mineral molybdenite, substituting for molybdenum atoms in the mineral's crystal lattice.

Rhenium has one of the most surprising and indirect methods of production of any metal. "About 80 percent of the rhenium obtained through mining is recovered from the flue dust produced during the roasting of molybdenite concentrates from porphyry copper deposits."

Rhenium has few uses, but they are very important uses. Over 80 percent of the rhenium consumed worldwide is used to make the turbine blades of jet engines. These blades must be made from super alloys that can survive in the extreme stress and high-temperature environment of a jet engine. Most of the remaining rhenium is used as a platinum-rhenium catalyst in petroleum refining.

Lubricant Uses of Molybdenite

Molybdenite has a layered atomic structure in which a sheet of molybdenum atoms is sandwiched between two sheets of sulfur. The bonds between the molybdenum and sulfur atoms are very strong. These S-Mo-S layers are stacked one on top of another, but the bonds between the layers are very weak. The bonds between the layers are so weak that light pressure can cause them to slide past one another - this explains the perfect and fragile cleavage of molybdenite. As a result, molybdenite has a slippery feel and a lubricant quality that is very similar to graphite.

Finely ground molybdenite is used as a solid lubricant to reduce the friction between sliding metal parts. Ground molybdenite is also used as an additive to some types of high-performance grease.

Uses of Molybdenum Metal

Molybdenite is the primary ore of molybdenum metal, which is an extremely important metal for making specialty alloys. Small amounts of molybdenum added to steel and other alloys can significantly increase their toughness, heat resistance, hardness, strength, and resistance to corrosion. Molybdenum is an important ingredient in making stainless steel, alloy steels, and a variety of super alloys. Molybdenum metal is also used in some electronic devices and to make heating elements used in high-temperature electric furnaces.

https://geology.com/minerals/

Physical Properties of Molybdenite Chemical Classification Sulfide

Color Bluish gray to silver
Streak Bluish gray, gray

Luster Metallic

Diaphaneity Opaque

Cleavage Perfect basal

Mohs Hardness 1 to 2

Specific Gravity 4.6 to 4.8

Diagnostic Properties Greasy feel, color, streak, specific gravity, hardness, crystal form, habit.

Chemical Composition Molybdenum sulfide, MoS₂

Crystal System Hexagonal

Uses The primary ore of molybdenum. An important ore of rhenium. A solid lubricant for metal-to-metal sliding surfaces.

Cuyuna Rock, Gem, & Mineral Society on the Web

www.cuyunarockclub.org



Sunshine Requests

If you know someone who could use a little sunshine—birth, illness, surgery, family death—please contact
Christi Higgins at 320-224-6650.



We're on Facebook! Cuyuna Rock, Gem & Mineral Society

is a closed group, so you must ask to join. After being approved you can follow the members' posts and add your own information.

Agates From Around The World Crowley's Ridge Agates Crowley's Ridge in Arkansas & Missouri



Crowley's Ridge Agates were found as river-worn pieces in the floodplains of Mississippi River near Forrest City, Arkansas and the hard limestone of Crowley's Ridge is said to be the source of those lace-like agates. Some agates may be found in Mississippi, Missouri and along the Mississippi River all the way to Louisiana.

The colors are typically dull yellow to tan and widely fractured, but good specimens have been found with great banding details and rare reddish colors. Some agates would look best if left in their natural forms, some look best if contour-polished, some looking best if oiled (ugh!), and others looking best if cut. From time to time, they can be found along Crowley's Ridge tracing to the laceagate and quartz site at Washington county. Some agates apparently had been made reddish as a result of wildfires and it must be noted that some agates can be heat-treated to get bright red and white colors.

http://www.sailorenergy.net/Agates/AgatesArkansasCrowleysRidge01.html

Precious or Semi-Precious Gemstones



Tourmaline is a boron silicate gemstone that may contain any of a number of other elements, giving it a chemical formula of (Ca,K,Na,[])(Al,Fe,Li,Mg,Mn)₃(Al,Cr,Fe,V)₆(BO ₃)₃(Si,Al,B)₆O₁₈(OH,F)₄. It forms trigonal <u>crystals</u> and has a hardness of 7 to 7.5. Tourmaline is often black but may be colorless, red, green, bi-colored, tri-colored, or other colors.

https://www.thoughtco.com/alphabeticallist-of-precious-and-semipreciousgemstones-4134639

The World of Jaspers Kambaba Jasper



This stone arises straight from Madagascar and South Africa. It is also a deposited stone that intertwined with stromatolites and consists of microcrystalline quartz.

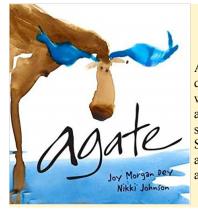
Stromatolites, on the other hand, are hardened colonies made by primeval microorganisms as well as cyanobacteria (blue-green algae).

This stone is also known as Crocodile Jasper, and Green Stromatolite Jasper.

There are also alternative names for Kambaba such as Bambamba, Kabamby, Cumbamba, Kakamba, and Kambamba. Nevertheless, Kambaba-Jasper is sometimes mistaken as a Nebula Stone.

Kambaba Jasper can also in Brazil, Germany, and France, in the USA, Belgium, India, and the Netherlands.

https://gemstagram.com/facts-aboutkambaba-jasper-meanings-propertiesand-benefits/



Agate: What Good Is a Moose? By Joy Morgan Dey

Agate is a moose with low self-esteem. He feels inadequate and plain, like an ugly brown rock, especially when he compares himself to his beautiful friends who are named after birthstones. These friend help Agate to see that just like his namesake, true beauty lies within. Stunning original watercolors, a witty, positive message about self image plus bonus pages with birthstone and agate facts. Perfect for reading aloud.

Cuyuna Rock, Gem & Mineral Society General Meeting Minutes Saturday October 12, 2019

Meeting called to order by President Ed Opatz at 2:00 pm. 33 members present, 1 guest.

Reminder to sign in at meetings. Welcome new members.

The Club is looking for a storage shed or 20 foot trailer.

There is some equipment for sale in the rock club. See Ed if interested.

Elections nominating committee- Kevin Martini, Lisa Hughes.

Need a Host/Hostess for meetings to help make sure people sign in and help with setup and clean-up.

Looking for a member for be in charge of Kid's Club.

Reminder of dates:

Cottage Grove show Oct. 19, 20. November... 11/2-meeting & elections, 11/9- Franklin Arts Center Holiday Craft Sale.

Alex Sample show- January 4, 2020, Live Auction- need volunteers. Need buckets for rocks.

Shop training and use will be focus of winter meetings.

Show and Tell- South Dakota trip.

Speaker- Ed & Marcia Opatz on trip to Morocco.

Door Prize Drawing winners: Lisa Hughes, Jim Bankey, Joan Guerra, Vern Iverson.

Respectfully submitted, Joanie Hanson, Secretary

What's the Difference Between Synthetic, Simulated, and Created Gemstones?

Synthetic Gemstones

You'll hear many terms used interchangeably with synthetic, such as "artificial," "labgrown," "lab-made," "man-made," etc. All these terms identify gemstones created in laboratories, not in nature.

There are many processes for synthesizing gems. Some are inexpensive, some are very expensive, but they're all conducted artificially, in a lab. They may mimic or reproduce natural processes and use the same ingredients found in the natural stones. However, these processes occur in labs, not underground in nature.

Some synthetic stones are chemically and optically identical to their natural counterparts. For example, synthetic emeralds may be real emeralds but not natural emeralds. Depending on the process used, synthetic gemstones may even have the same inclusions and flaws found in natural gems. Or, they may have telltale signs they're synthetic. Distinguishing between synthetics and their natural counterparts can be very difficult.

However, some synthetic stones just look

like natural stones without being chemically ic gemstones for sale. Although a synthetic and optically identical to them. (Some synthetic stones have no counterparts at all in nature). Gemstones synthesized in a lab that simply imitate natural stones are called simulated gemstones or simulants.

Simulated Gemstones

Not all simulants originate in labs. Glass pieces and assembled stones like doublets and triplets are often used to simulate natural gems. Sometimes, vendors may present one kind of natural gemstone as another, for Synthetic or created gemstones have been example, a garnet doublet cut to look like a ruby. Jewelers also frequently use spinels, both natural and synthetic, to imitate other gemstones.

Regardless of its origins, a simulated gemstone is a piece presented to "look like" another gemstone. A close gemological analysis would reveal its true identity. Simulants are also called imitations, faux, and fakes. While a garnet simulating a ruby may be a real garnet, it's a fake ruby. Some vendors may be honest about selling simulants. Others may not disclose what the gem truly is. (Sometimes, gems are sold with misleading names). Buyer beware.

Created Gemstones

People who sell synthetic gems rarely use the word "synthetic." You'll almost always find "created gemstones" instead of synthet-

may be a real gemstone, the term "synthetic" has strong popular connotations of being "not real" as well as "not natural."

Gemologically, a synthetic stone may be both real and not natural. Nevertheless, some consumers may find this qualification hard to accept. Referring to synthetic as created gemstones may help skirt those associations altogether.

on the market since the early 1900s. Simulated gemstones or "lookalikes" have been around as long as people have valued gems. Don't assume that an old stone is a natural stone.

Treated Natural Gemstones

There are many gemstone treatments and enhancements used to improve natural gemstone rough. For example, heat is often used on sapphire to improve color and melt silk inclusions. Some people would consider all treated stones as synthetic or created gemstones. Personally, I don't generally agree with this view. However, I think a gray area does exist. If a natural gem receives extreme treatments, it should fall under the synthetic category.

https://www.gemsociety.org/

Rock Room

This Club is unique because it has its own rock store. Here is an inventory of what is available for Club members to purchase. Stop in when you come to the Clubhouse.

Grit and Polish Montana Petrified Wood Montana Moss & Blue Agate Oregon Geodes Chalcedony Desert Rose Plume Agate

Yellow Jasper Bruno Jasper Owyhee Picture Jasper

Brazilian Agates Amethyst

Tee Pee Canyon Agate Hauser Bed Agate Thundereggs Slabs of all sizes and types Septarian Nodules-Utah 79 Bed Geodes—Oregon Moroccan White Agate Obsidian Mineral specimens Dinosaur bone Condor Agate Mexican Luna Lace Agate Starolites (Cross Rocks) Small Botswana Agate New material will be available soon from a recent donation.

A Few Tips for the Tucson Shows

When you first meet a dealer, you must assess what type of dealer they are. Each type of dealer can fill a special need. At the retail dealer, you should recognize that Tucson is just another show for them and the price you pay will be the same in Tucson as it will at the next show they do in a few weeks. But they have brought their best material to this show (often they have saved the REALLY special minerals specifically for Tucson.) So you should ask the dealer if they have anything new or special. Remember, the dealer knows his stock better than you - use their knowledge to make sure you don't miss anything that a casual viewing of their minerals may not reveal.

The wholesale importers may have a large stock of minerals, in many levels of quality and prices. You should look for new finds among their stock, since it is possible they may have a mineral find that nobody else has. There is also the possibility that they have a new find, but don't know what the mineral is or it is possibly misidentified. This is your opportunity to take a gamble

and pick up a specimen that may actually turn out to be something exotic.

Commercial collectors offer inexpensive minerals from obscure localities. They spend the year digging minerals and are selling them at moderate profit. Every year I look for certain collectors with minerals from Alaska, Arizona, New Mexico, Oregon, Washington, California. Even collectors from overseas will show in Tucson if they make a really big find. Because field collectors may not have big finds every year, they may not attend Tucson every year. This results in their displays being at the fringe shows, not the big venues that have regular dealer rosters.

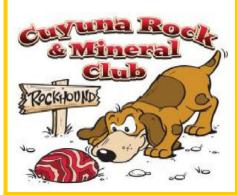
Obviously, there are dealers that blur they line between categories. Several notable dealers sell large quantities of minerals at wholesale prices in the hotel pre-shows (more about that later) and then move to the Convention Center to sell at retail prices.

http://www.johnbetts-fineminerals.com/ jhbnyc/articles/tucson.htm

Marcia Opatz, Editor Cuyuna Rock, Gem & Mineral Society 1001 Kingwood Street Suite B-40 Brainerd, MN 56401

FIRST CLASS MAIL







The Agate Explorer

December 2019

Official Publication of the Cuyuna Rock,

Gem & Mineral Society

Members of AFMS & MWF



Notes from the President

Marcia tells me we have quite a stash of white elephant gifts for the game at the Christmas party. It should be good food and good fun. If you can come early (9-11 a.m.) we need help preparing auction boxes.

We REALLY need help at the auction, which is Saturday, January 4. Most of the help is just to keep things organized. The building will open at 6:00 a.m., the show and viewing begins at 9:00, and the live auction starts at 10:30. Since we have never done this before it's hard to know how much help we need. I would rather have too much than not enough. Please call me if you can help. 320-250-1363.

I have started the process with Carrie Ruud, Minnesota Representative, to consider changing the law to allow rock collection in the Cuyuna Recreational Area. Our Club and many other rockhounds that I have talked to are very interested in collecting binghamite in that area.

Our RV is headed south after January 1. If any of your are traveling that way and would like to meet at a show (Quartzsite, Tucson, Deming), or would like a collecting partner, let me know. I can never have too many rocks!

Ed Opatz

Club Officers & Board of Directors

cuyunarockgemclub@gmail.com

President: Ed Opatz opatz1@att.net 320-250-1363

Vice-President: Sharon Smith sharon@agatesrock.com 218-343-7037

Secretary—Joanie Hanson secretarycuyunarockgemclub@outlook.com 218-831-2665

Treasurer: Kevin Martini treasurer@cuyunarockclub.org kjspumanti69@gmail.com 218-770-8917

Director: Lori DuBois
Director: Vern Iverson
Director: Lilly Peterson

Newsletter Editor: Marcia Opatz theisma@hotmail.com 320-250-8120