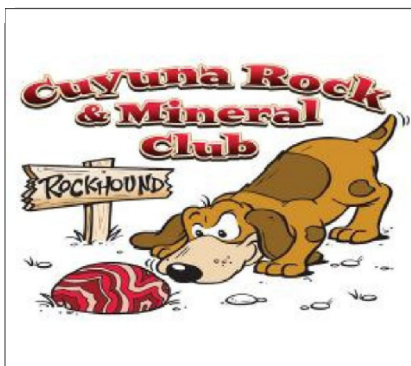


The Agate Explorer

August 2023




August Meeting Saturday, August 12

10:00—Rock equipment available for use; Rock Wrappers
12:00 noon—Board meeting
2:00—Speakers—Mike Braun and Lilly Person—will demonstrate how to make a cabochon.



Franklin Art Center



Rock Wrappers

Open gathering for wire wrappers starting at 10 a.m. on meeting Saturdays.

Hang out with other wrappers, and work on your projects.
(Bring all supplies needed.)
Learn tricks to make wrapping easier, a new design, or perhaps a new place to find supplies.

All skill levels welcome!



Volunteer Needed

The Club is looking for someone to be a field trip coordinator. This person would look for locations to rockhound and organize the trip. It would not be necessary to go on every trip, but have contact information available.

Assistance given by Board members.

Call/text Ed Opatz at 320-250-1363.

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.

2023 Field Trips



August 3-11 Billings MT
American Federation's yearly conference, includes rock show Aug. 3-6 and field trips.

Mon. Aug. 7: Bear Canyon Agate
Tue. Aug. 8: Bear Paw Formation - Shale Fossils

Wed. Aug. 9: Montana Agate - Yellowstone River Valley

Thu. or Fri. Aug. 10 or 11: Cedar Creek

Anticline – Marine Fossils* and/or Digging for Dinosaur Bones* (fee site)
*Tentative

Pre-register for field trips. Website for more information and field trip registration.
<https://show.billingsgemclub.com/>

Throughout the spring/summer/fall
any location to pick Lake Superior agates.

If you are interested in any of the above trips, please contact Ed Opatz at 320-250-1363 or opatz1@att.net.

Club Calendar

- August 3-11**—American Federation conference/rockhounding
- August 12**—meeting date
- September 9**—meeting date, Speaker Bill Tromley on bighamite
- October 14**—meeting date
- November 11**—meeting date
- December 9**—Christmas party

Information subject to change.



Club Purpose:

To foster an interest (& encourage young & old) to study earth science, enjoy the art of lapidary, hunting for rocks, and semi-precious 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.

**Cuyuna Rock, Gem & Mineral Society
Meeting Minutes
Saturday, June 10, 2023**

Board Meeting

Call to order-The meeting was called to order at 12:14pm by President Ed Opatz.

Present were: Vice-President Lori DuBois, Treasurer Kevin Martini, Secretary Joanie Hanson, and Board Members-at-Large Judi Laurence, Vern Iverson, and Jo Schwalboski.

A motion to approve the minutes from the last meeting was passed.

Treasurer's report- A motion was passed to approve the report that will be filed at the rock club. A motion was passed to approve paying all the current bills.

Discussed updates in rock room. Grit, rock etc.

Show wrap-up- the board reviewed the survey results from the show vendors. Jo will compile the information and give a full report at the next meeting.

The Board decided to look for a smaller wizard chair for next year. The current one is too big, heavy, and difficult to move. There weren't enough volunteers to work the show but plenty of members. Hopefully we can do better next year. Need more hand stamps at the show entrance as well as exit.

The annual club picnic will be July 8th.

Summer activities- Refer to newsletter and emails for updates on summer activities.

Facebook- Joanie is now an admin as well as Sharon on our club FB page. Reminder- the Facebook club page is for members only!!! There is a public page that is tied to the club website that anyone can access.

General Meeting

Call to order- The meeting was called to order at 2:10pm by President Ed Opatz. 30 people were present.

Grand prize drawings- Jennifer Johnson won the rock tumbler. The show card drawing winner will be picked at our club picnic. Treasurer's report- the report will be posted at the rock club.

Show wrap-up-see above.

Summer Activities- refer to newsletter and emails for updates.

Door prizes were won by- Dolores Sibet, Vern Iverson, Peter James, Alan Busacker. Several people brought rocks for show and tell.

Meeting adjourned at 3:15pm.

Respectfully submitted,
Joanie Hanson, Secretary



**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.



**August
Birthstone
Peridot**

The modern August birthstone, peridot has been

prized as a jewelry stone since ancient times. Always green in color but with considerable variations, a peridot's particular shade depends on its source.

Peridots have been credited with protecting their wearer during the night. This is due to the fact that the lively appearance of peridot fostered ancient associations between the gemstone and the sun. It was thought that keeping the stone close during dark hours repelled nighttime evil spirits.

The green hue of some peridot may overlap with the green color displayed by emeralds. However, peridot often features a unique yellowish overtone not observed in emeralds. Some stones have a brownish appearance.

<https://www.gemsociety.org/article/birthstone-chart>

Smoke Free Policy For Franklin Arts Center

As a tenant of Franklin, this includes the Cuyuna Rock, Gem, and Mineral Society

Due to the increased risk of fire, and the known health effects of secondhand smoke, Franklin Arts Center and Brutger Equities have established a Smoke Free policy for all tenants. This updated policy is effective August 1, 2023.

Smoking is prohibited in any area of the property, private, public, and common, whether enclosed or outdoors. This policy applies to all owners, property staff, applicants, residents, tenants, guests, and service providers. **Please note that this includes the parking lots and green areas of the Franklin Arts property.**

"Smoking" shall include the inhaling, exhaling, or carrying of any lighted cigarette, cigar, e-cigarette, pipe, other tobacco products, cannabis (marijuana) including medical cannabis, herbal smoking products or products known as "bath salts" or other legal or illegal substance.

Use of Smoke-Free Tobacco Products

The use of any oral tobacco products will be prohibited from all public and common areas including, but not limited to, the management office, community room, any areas where meals are prepared or served, laundry room, sidewalks, parking lots, fields, walkways, and recreational areas. The policy applies to all property staff, tenants, tenants' guests, tenants service providers, contractors and visitors.

Spinning Wheel Success

For a number of years the Club has used a spinning wheel of chance for income. Volunteers run the wheel at the Club's show in Brainerd, along with several town days, craft shows, or other gem and mineral shows.

This photo on the right was from the Moose Lake Agate Days from mid-July. Business was very brisk on Saturday. The overall amount of money taken in was over \$900!

Thanks to Kathee and Mike Stanwood, two of the weekend volunteers.



Sunshine Requests

If you know someone who could use a little sunshine— birth, illness, surgery, family death—please contact Joanie Hanson at 218-831-2665.





There are Club members who teach lapidary related classes at the Paramount in St. Cloud. Here are the upcoming classes:

More information is available at:
www.paramountarts.org

**Intro to Lapidary:
The Art of Working with Stones
Tuesdays, Sept. 26-Oct. 24, 6-8pm
Instructor: Jim Magnuson
Fee: \$125
No prior experience needed.**



Learn fundamental lapidary equipment, tools, & processes. Gemstones brought by the participants or provided by the instructor will be used to learn lapidary equipment and operations to cut, shape, polish, and set to jewelry. Participants might use their completed cabochons in the Paramount Wire Wrapping class.

Learn to use lapidary tools & processes to create cabochons and pendant necklaces, and (if desired) face polished stones for display. Lapidary processes of tumbling, cutting/sawing, shaping, polishing, and drilling will be taught.

Each course participant will go home with multiple finished lapidary pieces. It is recommended but not required that participants acquire and review the book *Gemstone Tumbling, Cutting, Drilling & Cabochon Making*, which can be purchased online at Amazon or Barnes & Noble websites, or perhaps your local bookseller.



**Wire Wrapping Stones
Sat., Oct. 28, 2023;
9:00 am - 3:00 pm
Instructor: Jo Schwalboski
Fee: \$95
No prior experience needed;
Ages 14+**

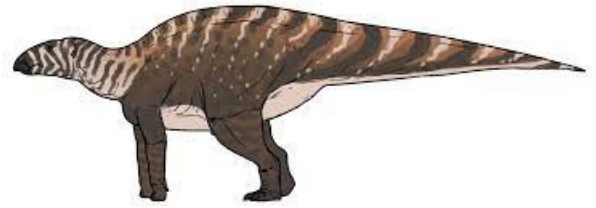
Join us as we dive into the exciting world of stone wire wrapping! Choose from 100's of unique stones in fun colors

and shapes, to wrap in ornate designs using copper or brass wire (silver wire upgrade option available for an additional charge the day of class). Jo will provide all of the techniques, tips, tools, and materials for you to walk away from class with a completed piece that you will be proud to wear or give as a gift!

All materials to create one wrapped stone are included in the cost of tuition.

*Upgrade options of stone size and type, along with silver wire are available for an additional cost at the time of class.

Remains of New Species of Duck-billed Dinosaur Found in Chile



Remains of a species of herbivorous dinosaur previously unknown in the southern hemisphere have been discovered in Chile, challenging long-held beliefs about the range of duck-billed dinosaurs, scientists said Friday.

Measuring up to four meters (13 feet) in length and weighing a ton, *Gonkoken nanoi* lived 72 million years ago in the extreme south of what is now Chilean Patagonia.

"These were slender-looking dinosaurs, which could easily adopt a bipedal and quadrupedal posture to reach the vegetation at height and at ground level," said Alexander Vargas, director of the paleontological network of the University of Chile and one of the authors of the study published by the journal *Science Advances* and presented in Santiago.

The discovery demonstrated that Chilean Patagonia served as a refuge for very ancient species of hadrosaurs, a type of duck-billed dinosaur common in North America, Asia and Europe during the Cretaceous period, from 145 to 66 million years ago.

Their presence in the remote southern lands surprised scientists, who will have to "understand how their ancestors got there," Vargas said.

Gonkoken nanoi, the fifth species of dinosaur discovered in Chile, was actually found in 2013, kicking off a decade-long investigation.

The name *Gonkoken* comes from the Tehuelche language, the first inhabitants of the region, and means "similar to a wild duck or a swan."

<https://phys.org/news/2023-06-species-duck-billed-dinosaur-chile.html>

Is Your Stone Real?

Here are a few tricks, but they are NOT ALWAYS accurate.

Hold a cut stone to the sun, table toward your eye. if you can see straight through it, it is a form of glass, because glass reflects light, while gem material refracts light.

Weigh it: Diamonds weigh more than cubic zirconia.

Does it have flaws or inclusions? Lab stones (aka "synthetic") are no different than natural stones, except that lab stones are perfect: they have no flaws or inclusions.

The warmth test: If you hold a stone to your upper lip and it stays cold, it is a rock; if it gets warm really quickly, it's plastic; and if it warms slowly, it's glass.

One of the least expensive ways to help identify gemstones is to use a combination short and long wave, ultraviolet light, as described in this awesome book: *Gem Identification Made Easy*, by Antoinette Leonard Matlins.

https://www.wirejewelry.com/jewelry-making-blog/4653/?inf_contact_key=874722aa109bf240cfd7aab5c3692fc2850050e7915f41da51043c293c2d487f

Agates Around The World

Purple Burro Creek Agate



Purple Burro Creek agate is a gemstone occurrence located South of Burro Creek and East of the Big Sandy Wash, near the Aquarius Mountains.

Burro Creek is located North West of Wickenburg Arizona near the Bagdad mine.

This site hosts a wide variety of cutting materials but is best known for its Pastelite and its purple agate. Some specimens there have a vivid translucent purple agate with gold colored inclusions.

**Cuyuna Rock, Gem,
& Mineral Society
on the Web**

www.cuyunarockclub.org

Upcoming Midwest August Rock Show

3-6—BILLINGS, MT: 2023 American Federation & Northwest Federation Gem & Mineral Show; Billings Gem and Mineral Club; Billings Hotel and Convention Center; Thu.-Sat. 10-5, Sun. 10-4; Adults \$5 per day or \$15 for 4-day pass (cash only) Under 12 free; Website: BillingsGemClub.com

9- HANCOCK, MI: Quincy mine hoist annual rock swap; Friends of the Quincy Mine Hoist Association; Quincy Mine Hoist; Wed. 10-7:30; free admission; Email: derekdogg1@gmail.com

11-13—HOUGHTON, MI: Copper Country Rock and Mineral Club; Houghton Elementary School; Fri. 1-8, Sat. 10-6, Sun. 10-3; Free; Website: <https://ccrmc.info>

18-20—SOUTH BEND, IN: Michiana Gem & Mineral Society; St Joseph County 4H Fairgrounds; Fri. 12-7, Sat. 10-6, Sun. 11-5; Adults \$3 Kids 6-12 \$1 Under 6 free; Website: www.facebook.com/MichianaGemandMineralSociety

19-20—RICE LAKE, WI: Northwest Wisconsin Gem & Mineral Society; Barron County Fair Grounds; Sat. 10-5, Sun. 10-4; Free; contact Roy Wickman, (715) 357-3223

26-27—ELK MOUND, WI: Rock Swap Meet; Chippewa Valley Gem & Mineral Society; Town of Wheaton Ball Parks - South Field; Sat. 8-4, Sun. 8-4; Free; Email: CVGMS2017@gmail.com

26-27—EAST PEORIA, IL: Show and sale; Geology Section of Peoria Academy of Science; EastSide Center; Sat. 9-5, Sun. 10-5; Free; Website: pasgeology.com



A group of 15 Club members enjoyed a tour of Northland Monument near Longville. The tour was very informative, as members learned about how very large stones are cut and engraved for landscaping and memorials.

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
Oregon Geodes
Chalcedony
Desert Rose
Plume Agate
Yellow Jasper
Bruno Jasper
Owyhee Picture Jasper
Brazilian Agates
Amethyst
Obsidian
Mineral specimen
Hauser Bed Agate
Thundereggs
Mexican Geodes
Montana Petrified Wood
Montana Moss
Tee Pee Canyon Agate
Slabs of all sizes and types
Septarian Nodules—Utah
79 Bed Geodes—Oregon
Moroccan White Agate
Mexican Luna Lace Agate

Small Botswana Agate
Smokey Quartz crystals - Colorado
Snowflake Obsidian
Utah Petrified Wood
African Blue Lace Agate
Carnelian Agate
Tiger Eye—red and blue

New!

Tiger Eye—gold & blue Variegated
Obsidian
Condor Agates
Agua Nueva Agates



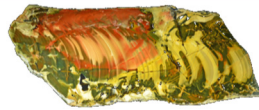
Polychrome Jasper
Tabasco Agate Pairs
Sunset Jasper
Noreena Jasper
Tiger Iron
Kumerha Jasper
Swazi Agate
Calandria Agate (Mexico)
New Moroccan Agate

The Sanctuary— A Boutique Hotel in Crosby

For a number of years the Cuyuna Rock, Gem, and Mineral Society held their meetings in a rented basement of a former church in Crosby. The lease was terminated and the Club needed to find another location to hold meetings, moving to Brainerd in 2016.



The church sat empty for a number of years and now has been revitalized as a boutique hotel. Members from years ago will be surprised to see the changes. More photos and information are available at: <https://thesanctuarycrosby.com/>



The World of Jasper Porcelain Jasper

Carrasite Jasper comes from the famous Morrison Ranch area. The Morrison Ranch is above the Owyhee Mountains of southeastern Oregon, in Malheur County near the Idaho border.

Carrasite Jasper was found and therefore named for Charlie Carras who mined the site in the 1970's. He worked the mine down about 10-15 feet. He and his brothers also had Morrisonite claims.

Carrasite Jasper is a nice porcelain gemstone jasper found in the same area as the famous Morrisonite Jasper and it looks very similar to it. Both make lovely designer cabochons.

Steve Schultz of Silver Streams took over the claim in 1999 and he is currently working it about 65 feet deep.

<https://www.barlowsgems.net/carrasite-jasper-cabochons/>



Kid Cor s' ner

Facts About Agate

Agates are found all over the world and agate deposits have been found in nearly every continent! The most common type of agate is called chalcedony. Chalcedony has quartz varieties that have a cryptocrystalline structure. This means that the crystals are too small to be seen with the naked eye.

The famous gemstone agate comes from the River Dirillo in Sicily, where it was said to be



Agate Gemstones

originally found.

The river now owns the credit for giving these beautiful minerals their name and will always remember what gave them so much happiness.

The first historical reference of its usage came from the ancient world, around 400 BC when the Greeks began using agate as jewelry and beads. This points out that they had long before this period mastered rock carving techniques!

Agates are beautiful stones with ancient origins. The gemstone is said to have been in use for over two million years.

It was among the first materials to be famil-

iarized by humans, and it's believed that wearing agates made you friendlier back then!

Persian culture used to believe that the stone was effective in preventing storms.

It's also believed by many people across various cultures, including those from ancient Greece and India, both where it has been used as an object of worship or ornamental beauty for centuries, to be a protective stone with healing properties such as relieving thirst when worn against your skin!

Laguna agate is amazing, highly praised, banded agate that has bright colors and tight bands. It's found in the remote north-south trending mountain ranges of Chihuahua, Mexico.

<https://kidadl.com/facts/agate-facts-for-kids-to-learn-about-the-multi-colored-gemstone>

Gem Encyclopedia

Amazonite

A green to blue-green variety of microcline, amazonite makes a wonderful gemstone for cabbing and carving.



Also called "Amazon stone," amazonite is the only microcline you're likely to encounter as a gemstone. Microclines are potassium feldspar with a triclinic crystal structure.

Amazonite color can range from pale green to dark green and blue-green. These specimens usually (but not always) show white mottling.

By 5,200 BCE, cultures in Northern Africa, Mesopotamia, and the Indus Valley had begun cutting amazonites. Lapidaries all over the world have fashioned this gemstone into cabochons, beads, and carvings for millennia.

With a hardness of 6 to 6.5, amazonites are softer than other common jewelry stones, like quartz and beryls. This means amazonites are still susceptible to scratching from everyday hazards, like household dust (which has a hardness of 7). With perfect cleavage, amazonites may also break if accidentally struck. However, these gems will still make excellent jewelry stones for earrings, pendants, and brooches, which usually don't receive rough wear. With protective settings, they can also make beautiful ring stones.

Amazonites lack transparency, so they're seldom faceted. Nevertheless, aficionados of opaque gems might appreciate the appearance and novelty of such a piece.

Scientists have synthesized microcline feldspars for research purposes. However, there are few scholarly references to synthetic or lab-created microcline, and there's no indication amazonites are specifically created or that any of this material makes its way into jewelry use. Furthermore, feldspars are very common, and amazonite isn't too well-known as a jewelry stone. Thus, it's unlikely any great consumer demand exists for lab-created amazonites.

Despite this, you can easily find "synthetic amazonite" for sale online. Nevertheless, it's not clear if these stones are actually lab-created or just lookalike materials. These may be instances of the term "synthetic" being used in the popular sense of "not real."

Mined amazonites may also receive a number of treatments, such as impregnation (to conceal fracture inclusions) and coatings and dyes (to improve color). With irradiation, white microcline specimens may also turn into blue-green amazonites. This is a rare but stable treatment.

Some people may consider treated gemstones, even natural stones, to be "not natural." Those so-called "synthetic amazonites" offered for sale may just be treated, natural amazonites.

Amazonite isn't an expensive gemstone. On the other hand, jade is very popular and can command high prices. Vendors may market amazonite as "Amazon jade," since some green specimens may resemble jade and consumers may assume it's a variety of that famous material. Some may be willing to pay more for a supposed jade, too.

Of course, feldspar, jadeite, and nephrite are distinct gem species. Gemologists can easily distinguish these gemstones. "Amazon jade" is a misleading name. If you encounter "Amazon jade" for sale, buyer beware.

Amazonite has been associated with the Amazon, by name, since 1701 and possibly earlier. The noted mineralogist August Briethaupt officially named the stone "amazonite" in 1847, after an unspecified type locality near the Amazon River.

Although amazonite does occur in Brazil (in the states of Minas Gerais, Paraiba, and Rio Grande do Norte) and Peru (in Huanacavelica province), there are no known sources of this mineral within the Amazon rainforest itself or near the eponymous river.

Brazil and Peru produce fine amazonites, but this gemstone also occurs in many localities across the world.

In the United States, the area around Pike's Peak, Colorado and Amelia Courthouse, Virginia produce beautiful, gem-quality amazonites.

Ethiopia has also emerged as a producer of top-quality amazonite.

Other notable gem-quality sources include the following:

Canada; China; Madagascar, Mozambique; Myanmar; Pakistan; Russia.

Hobbyists can usually buy amazonite rough by the pound. Consumers can find cabochons in almost any size.

Untreated amazonites may have internal fractures, which can expand if subjected to mechanical cleaning systems, like steam or ultrasound. Treated stones may also lose their coatings and/or fillers through these processes. Instead, clean these gems with a soft brush, mild detergent, and warm water.

<https://www.gemsociety.org/article/amazonite/>

ROX BOX

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



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

For Sale: 5 spools (10 yards each) of chain in a variety of colors. Includes jump rings and clasps. \$25 for all. Also some sterling silver chain. Please call Marie Israel at 218-924-4017.

For Sale: Three arbors with 8 Inch Diamond nova wheels, three motors, all set up ready to go. Fully plumbed and includes water pump. Mounted on countertop with bench included. \$800. Call/text Kevin Martini at 218-770-8917.



Wanted: Rock Saw, 14-16 inch blade and tumbler, 20+ pounds. Contact Mike Stanwood at 218-821-4775.

For Sale: Two antique display cases with glass shelves. \$150 each. Call/text Kevin Martini at 218-770-8917.



For Sale: I have many pieces of equipment for sale—saws, tumblers, flat laps, and grinder/polisher/sanders. I also have many wheels and motors. Contact Ed Opatz at 320-250-1363 or opatz1@att.net

Many More Dinosaurs to be Discovered

Paleontologists have been unearthing various non-avian dinosaurs that roamed our planet between 66 million and 235 million years ago and they claim that more dinosaurs remain unknown than have been uncovered.

Not all of these new dinosaurs are just another flavor of sauropod or stegosaur, not just another type of tyrannosaur that differs from other tyrannosaurs by a tiny bump on its snout or an extra tooth,” Brusatte explained. Some of these new finds are of species completely unknown to paleontologists thus far and their discovery can alter the big picture of how dinosaur evolution unfolded through the Triassic, Jurassic and Cretaceous Periods.

Recently, two new types of species were discovered; one which belonged to a group called rhabdodontomorphs that was only recognized in 2016 and another beaked dinosaur called Gonkoken from Chile.

“Of course there are more groups out there,” told the Smithsonian New York Institute of Technology paleontologist Karen Poole. A 2006 study speculated that to date paleontologists had found less than 30 percent of all non-avian dinosaurs and that finding 90 percent of those species would require another 100 years.

<https://interestingengineering.com/science/more-species-of-dinosaurs-are-to-be-discovered-that-have-already-been-found>

Can Metal Detectors Detect Rocks?

I first realized the value of a metal detector when I saw an amazing gold specimen labeled “The Dragon.” It was perfectly crystallized, about seven inches high and Bryan Lees, a Collector’s Edge dealer, said it would likely sell for six figures. He said it had been found in the Colorado Quartz mine, near Mariposa, California, by miners using metal detectors.

That got my attention. Bryan made arrangements for me to visit the mine to watch miners using metal detectors to scan the walls of the old tunnels and then attack any spot that responded. That was a few years ago and those guys are still having success finding hot spots in that mine!

This is not the only “strike” I’ve seen made using a metal detector. My son Evan lives on a hillside that has an old gold mine on it. He has used his metal detector to find enough pieces of gold ore worth processing.

In Arizona, a couple of fellows were rock hunting with metal detectors in the Richmond Basin silver mining district north of Globe, Arizona. They hit it using metal detectors!

Silver nuggets had been collected by the Apaches hundreds of years ago and in the 1800-1900s silver mines operated here. The nearby town of Globe was so named because a large rounded chunk of native silver reminding them of a globe was found near there.

Tiny nuggets of native silver were still found in Richmond Basin, so a couple of them decided to check it out. They walked the washes in the entire Basin with their detectors. They found one or two small heavy, dull black rocks of tarnished native silver. They decided to get serious and organized a small group of collectors with detectors to check the entire area including the surrounding open desert.

They found several more small silver nuggets



before their efforts paid off when they found two large masses of native silver each weighing in at over 100 pounds. The pieces were less than two feet

The pieces had weathered out of an as yet unknown vein of silver and been buried by years of weathering.

Finding these two masses of silver would make anyone jump for joy. But the best was yet to come. One of the fellows was about done for the day and was scanning the ground as he walked to his vehicle when signals stopped him in his tracks. He was getting wide-ranging signals from something big. This time, they dug down less than two feet and uncovered a mass of silver you only dream about. The silver mass they exposed was almost three feet long, well over a foot wide and many inches thick. The find of a lifetime!

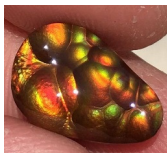
Once exposed and wrapped for protection, it took five guys hours to haul this treasure across the rough desert to a vehicle. When they finally weighed it on the scale, it hit an amazing 417 pounds!

Now that’s what I call a successful day in the field with a metal detector. What’s it worth? You tell me!

<https://www.rockngem.com/can-metal-detectors-detect-rocks/>

The Value Of Agate In 2023

The type of agate plays a major role in determining its price. Some types, such as fire or moss, dendritic, and plume agates, are rarer and more desirable than others, which can drive up their value. Additionally, other types may have unique properties or patterns that make them more valuable to collectors or gemstone enthusiasts.



For example, picture or scenic agate, which has intricate, picturesque patterns that resemble landscapes or scenes from nature, is highly prized by collectors and can command high prices. Similarly, iris agate, which has a distinctive play of color similar to opal, can also be quite valuable due to its rarity and beauty.

Some colors of agate are more desirable than others, and can command higher prices as a result. For example, specimens with vibrant, saturated colors may be more valuable than those with more muted tones.

Similarly, agates with intricate and complex patterns are often more sought after than simpler ones.

Agates that are free of cracks, blemishes, or other imperfections are more valuable and considered of higher quality than those with flaws.



Agate is known for its natural patterns, banding, and inclusions. Many specimens of this gemstone have natural inclusions or patterns that are highly sought after by collectors, such as dendritic, plume, or moss agate. These inclusions add to the overall beauty and uniqueness of the stone, and even increases its value.

Cutting and shaping agate can greatly impact its price, as it can enhance its beauty and bring out its natural patterns and colors. A well-cut and polished agate will typically be more valuable than a rough or poorly finished specimen, as it can be more appealing to collectors and enthusiasts.

The way an agate is cut can also impact the display of its unique patterns and colors. Some cuts, such as the cameo cut, can create intricate and detailed designs within the stone, which can be highly prized by collectors.

It takes skill and artistry to transform a rough stone into a polished and intricately detailed work of art, so the more intricate and detailed

the carving is, the higher the price may be as it requires more time, effort, and skill on the part of the craftsman.

The quality of the craftsmanship is also an important factor affecting agate's value. A well-carved specimen with clean lines, smooth curves, and precise details will generally be more valuable than a poorly executed or rough carving.

Agates that come from certain locations or regions may be more highly prized than those from other areas, due to their unique characteristics or rarity.

For example, agates from Brazil, such as the famed Rio Grande do Sul Agates, are highly prized for their vivid colors and intricate banding patterns. Similarly, those from



certain locations in the United States, such as Oregon or Montana, may be

more valuable due to their rarity or unique characteristics.

While natural, untreated agates are generally more highly prized than treated or enhanced ones, some treatments, such as dyeing and heating, can enhance the beauty and value of an otherwise unremarkable piece.

Enhancements such as polishing or shaping can also impact the value of an agate, with a well-polished and precisely-shaped stone commanding a higher price.

Larger pieces of agate are generally more valuable than smaller pieces, as they offer more surface area for displaying the stone's unique patterns and colors.

Type Price (Per Carat)

Agate Fossils	\$5 – \$9
Banded (Fortification) Agate	\$0.4 – \$45
Blue Lace Agate	\$8 – \$30
Fire Agate	\$1.5 – \$25
Iris Agate	\$1 – \$4
Moss, Dendritic, and Plume Agate	\$16 – \$240
Turritella (Shell) Agate	\$0.03 – \$0.8

Measurement Price

A carat of Agate	\$0.03 to \$240
A gram of Agate	\$0.15 to \$1,200
An ounce of Agate	\$4 to \$34,019
A kilogram of Agate	\$150 to \$1,200,000
A pound of Agate	\$68 to \$544,310

<https://rockchasing.com/how-much-is-agate-worth/>



Minnesota Rock Shops

- Agate City** 721 7th Ave., Two Harbors 218-834-2304
- Agate Trails of Fellerer Creations** 471 Arrowhead Ln, Moose Lake 320-279-3553
- AM Rock Shop** 710 E River Rd, Anoka 763-421-2807
- Art & Soul** 5124 202 Main St Stillwater, 651-275-0255
- Beaver Bay Agate Shop** 1003 Main St., Beaver Bay 218-226-4847
- Christy's Crystals** 407 N Riverfront Dr, Mankato 507-720-1061
- Designed In Stone** 841 Forest Ave E Suite 110, Mora 651-248-8768
- Dream in Jasper Crystal Shop** 107 N Meridian St, Belle Plaine 763-301-1058
- Enchanted Rock Garden** 1228 E 66th St, Richfield 612-866-1140
- Jon's Gem Emporium** 184 North Hwy 10, Motley 218-640-1047
- Magic Mushrooms in the Crystal Garden** 171 Lake St N, Big Lake 612-805-7111
- MO'R Designs** 2100 Snelling Ave N Suite 13, St Paul 651-294-3069
- Naturally Unique** 137 Western Ave N, Park Rapids 701-429-0409
- Rocks and Things** 201 N Rum River Dr, Princeton 763-389-0979
- Rocks & Tools SeashellsbyShelly Rock and Crystal Shop** 2625 County Rd 37 NE, Monticello 763-295-2440
- Sacred Sage and Crystals** 118 Broadway E, Little Falls 320-360-3611
- Sample's Agates Gem and Mineral Shop** 18581 MN-371, Brainerd 218-821-6623
- Taylor's Falls Bead Store** 364 Bench St, Taylors Falls
- Those Blasted Things** 924 Kniss Ave., Luverne 507-283-4027
- Twin Pines Trading Post** 31049 Front St, Pequot Lakes 218-839-0829
- ZRS Fossils and Gifts** 3018 Lyndale Ave S, Minneapolis 612-824-1068

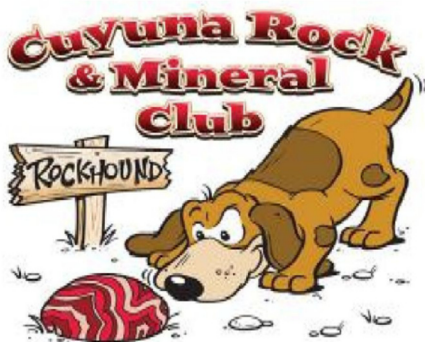
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Notes from the President

First, I want to thank Randy Heitz for stepping up and leading the field trip to Northland Monument and the agate pick. I appreciate people who help, It's better when more than just a few people do the work. Also, thanks to Ann Espland who found the gravel pit to look for agates.

There will be a small group of Club members going to Montana for the Billings show and field trips. I always look forward to finding new agates, my favorite!

Due to a medical issue, Dan Hammond is now traveling alone to Montana. I think he planned on leaving Minnesota on Saturday, August 5 and heading back home on Thursday, the 10th. If anyone is interested in joining him, let me know and I will give you his contact information.

We're starting to work on speakers for the fall/winter. There are already speakers lined up for August and September. If you have ideas for topics or speakers, please let me know! It's always good to have speakers that Club members want. Tentatively we have someone for October to demonstrate how to make bismuth.



Ed Opatz

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